

Fred Goodwin  
Executive Director  
Federal Regulatory

SBC Telecommunications, Inc.  
1401 I Street, N.W., Suite 1100  
Washington, D.C. 20005  
Phone 202 326-8913  
Fax 202 408-8731

ORIGINAL

EX PARTE OR LATE FILED



August 1, 2001

Ms. Magalie Roman Salas  
Secretary  
Federal Communications Commission  
445 12th Street SW  
Washington, DC 20554

RECEIVED  
AUG - 1 2001  
FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

**Re: ex parte presentation, CC Docket Nos. 96-98 / 98-147**

On July 31, 2001, representatives of SBC met with Jeff Carlisle, Senior Deputy Bureau Chief of the Common Carrier Bureau and other FCC representatives. A list of attendees is attached.

The purpose of the meeting was to discuss technical and policy issues related to SBC's deployment of advanced services, as set out in the attached materials.

Respectfully submitted,

A handwritten signature in cursive script that reads "Fred Goodwin". The signature is written in dark ink and is positioned above the printed name.

Fred Goodwin

Attachments

File of Original  
L. J. G.

012

## ATTENDEE LIST

### FCC

Jay Atkinson, Common Carrier Bureau / Competitive Pricing Division  
Jeff Carlisle, Common Carrier Bureau / Senior Deputy Bureau Chief  
Aaron Goldberger, Common Carrier Bureau / Policy Division  
Dennis Johnson, Common Carrier Bureau / Network Services Division  
Rodney McDonald, Common Carrier Bureau / Network Services Division  
Jessica Rosenworcel, Common Carrier Bureau / Policy Division  
Don Stockdale, Office of Plans and Policy

### SBC

Don Cain, SBC Federal Regulatory  
Fred Goodwin, SBC Federal Regulatory  
Christopher Heimann, SBC Legal  
Jim Smith, SBC Federal Regulatory

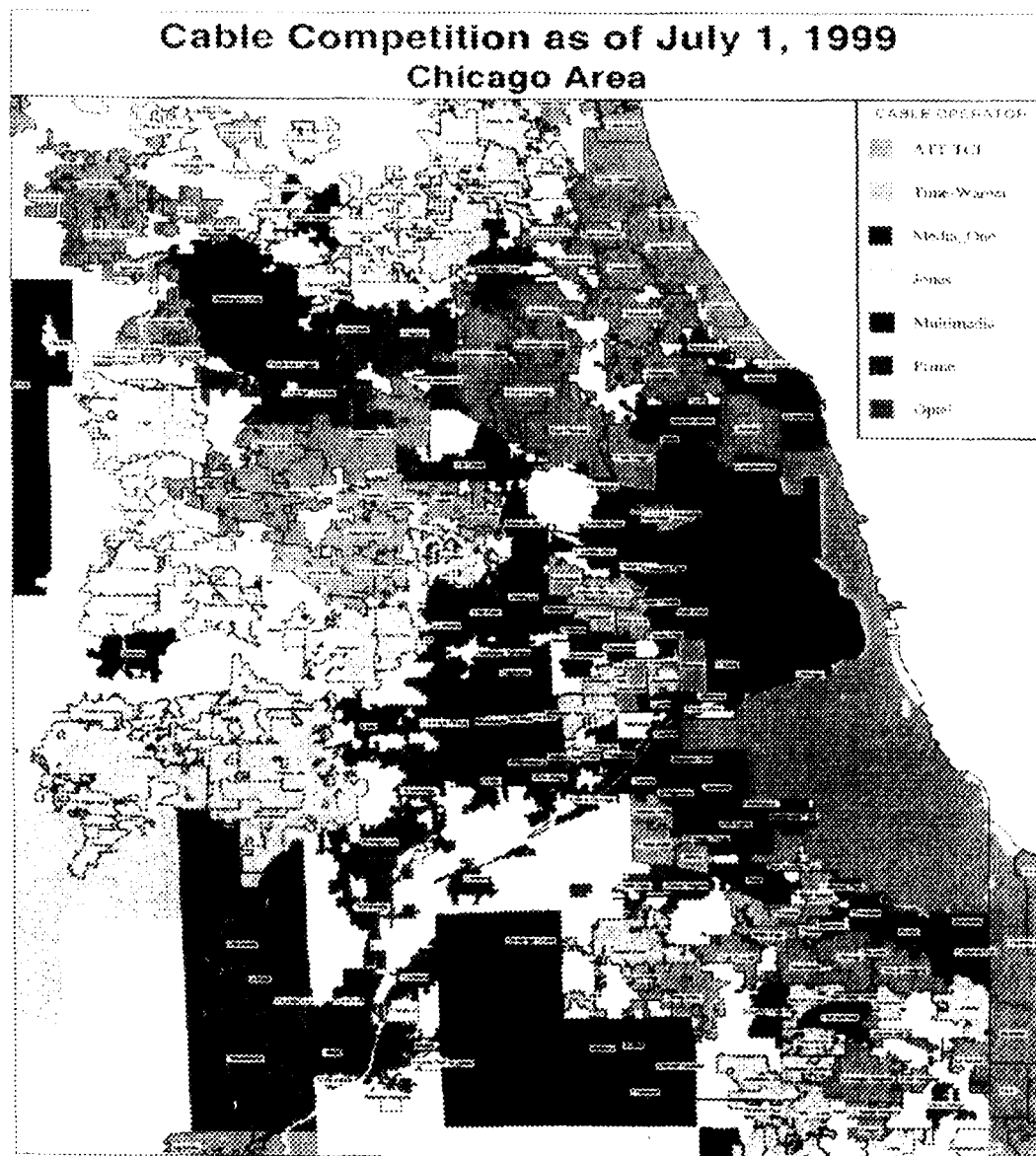


## Key Points

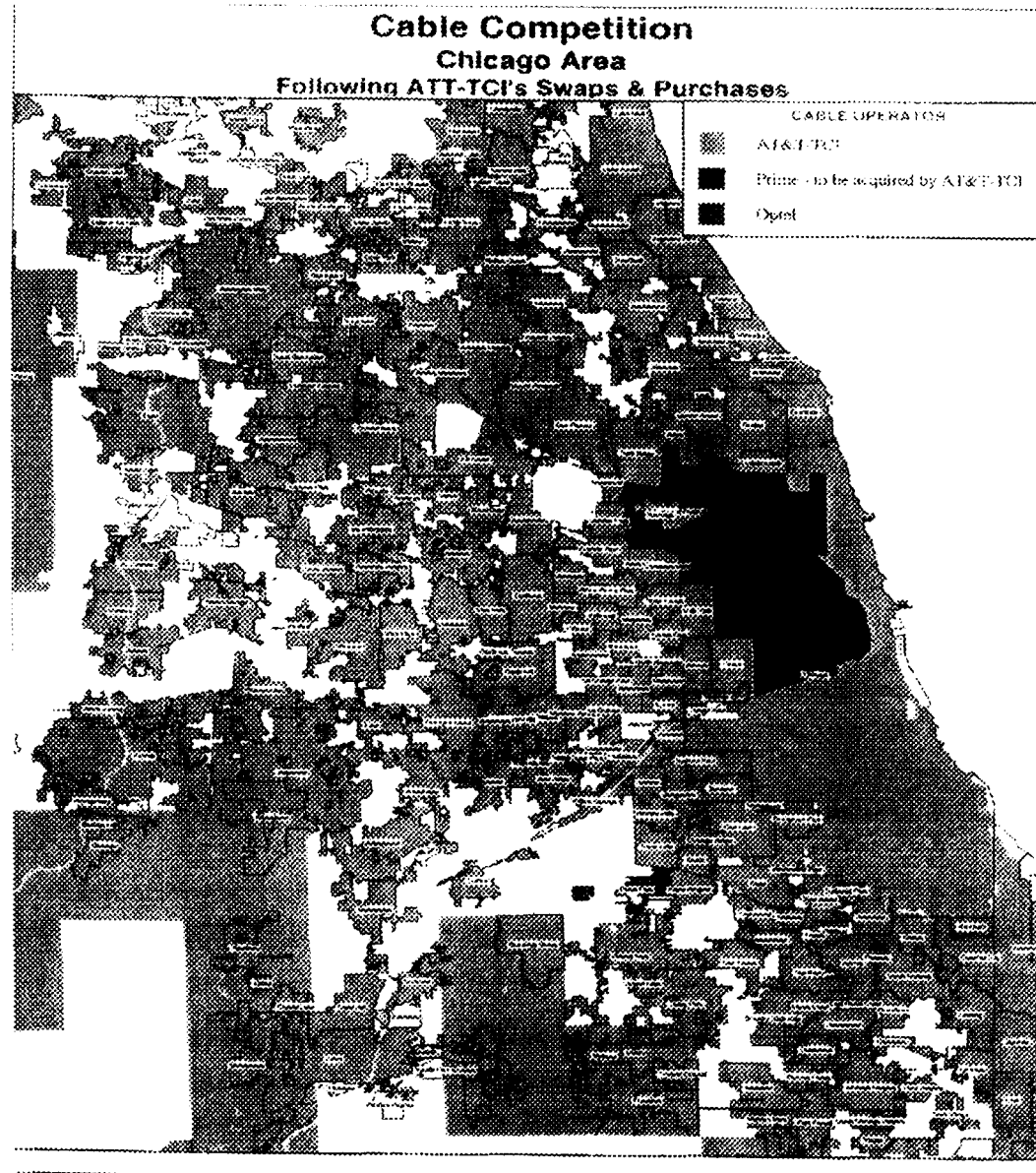


- One broadband market -- competitive
  - Cable, Wireline, Wireless, Satellite
  - Price sensitive; services fungible
- UNE Regulation will impeded mass market broadband investment and reduce consumer choice
  - Project Pronto Experience
  - Mass market vs. targeted deployment
- National policy should promote fair competition in broadband deployment
  - Same services, same regulation -- regardless of facility platform
- FCC decision making must reflect marketplace realities of competing platforms

# Cable Competition



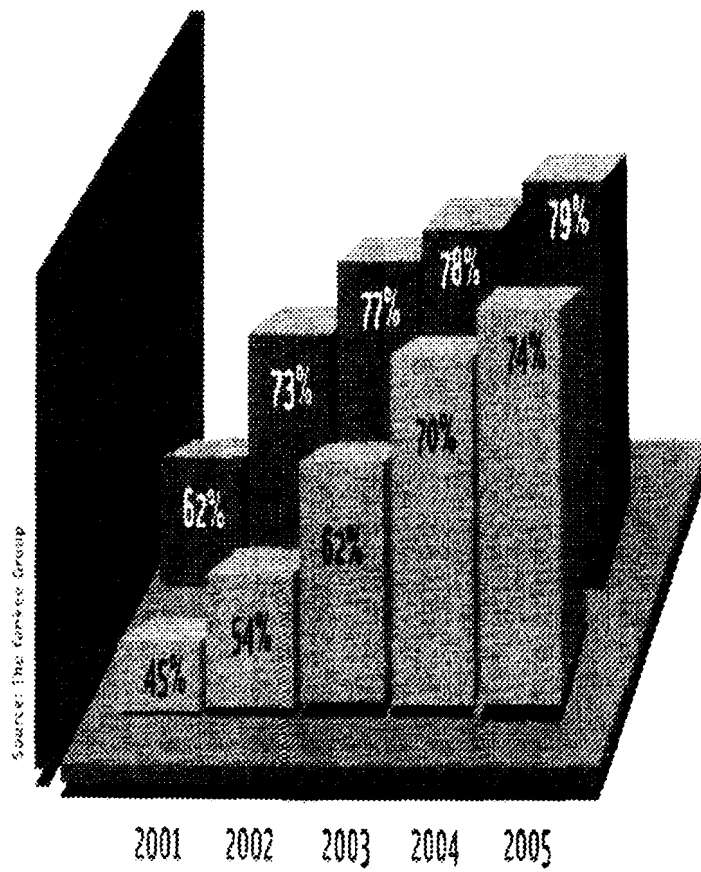
# Cable Competition



# Broadband: Cable is Dominant Provider

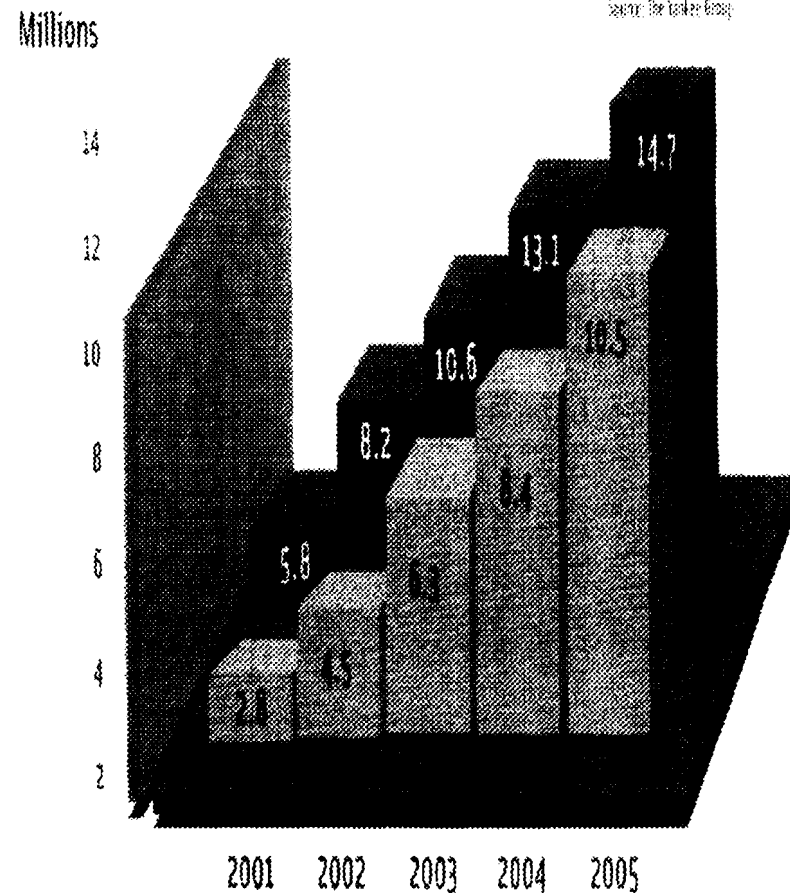


DSL service availability: 34 percent of U.S. households  
Cable modem service availability: 46 percent of U.S. households

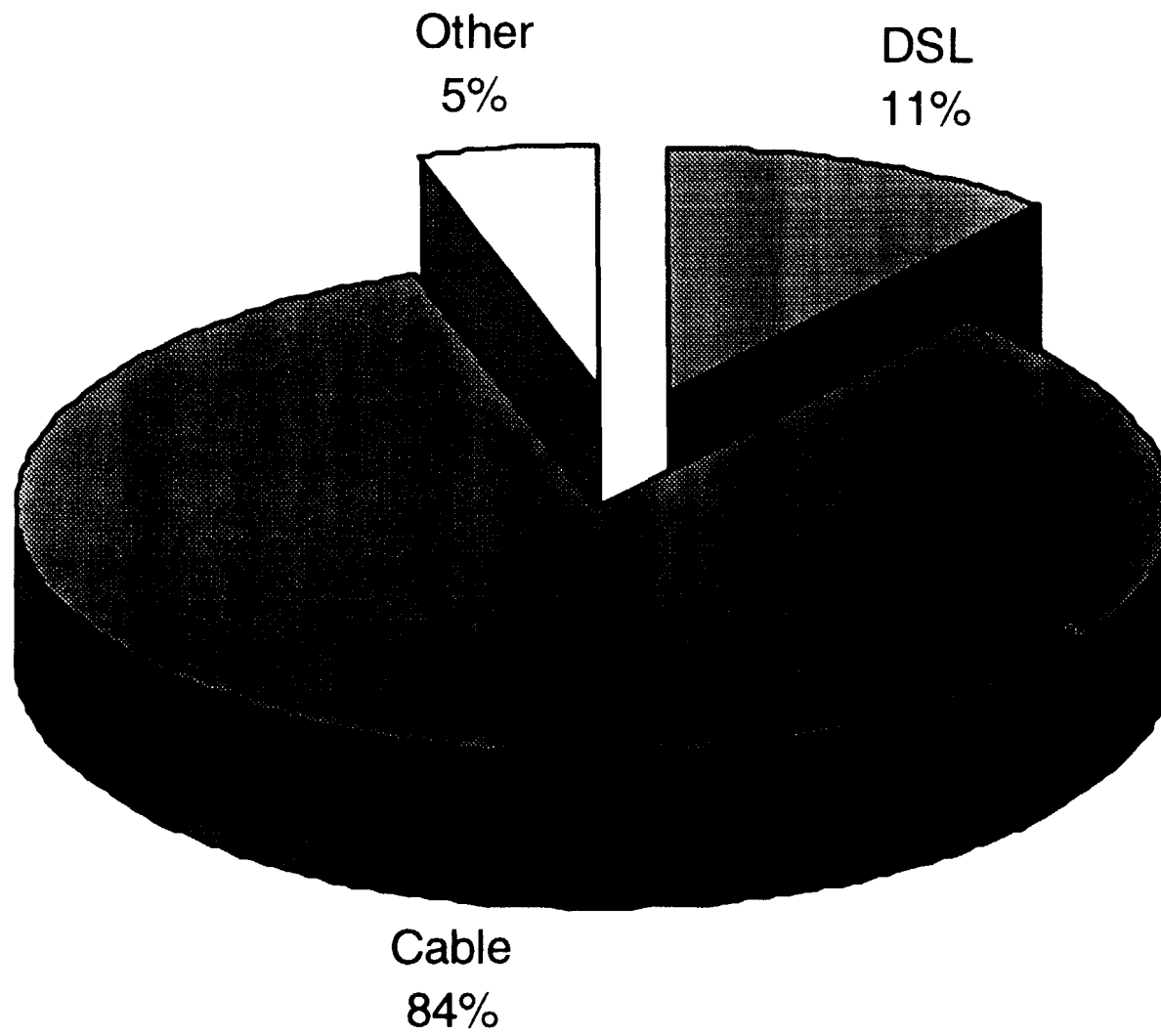


DSL subscribers: 1.5 million currently  
Cable modem subscribers: 3.5 million currently

Source: The Yankee Group



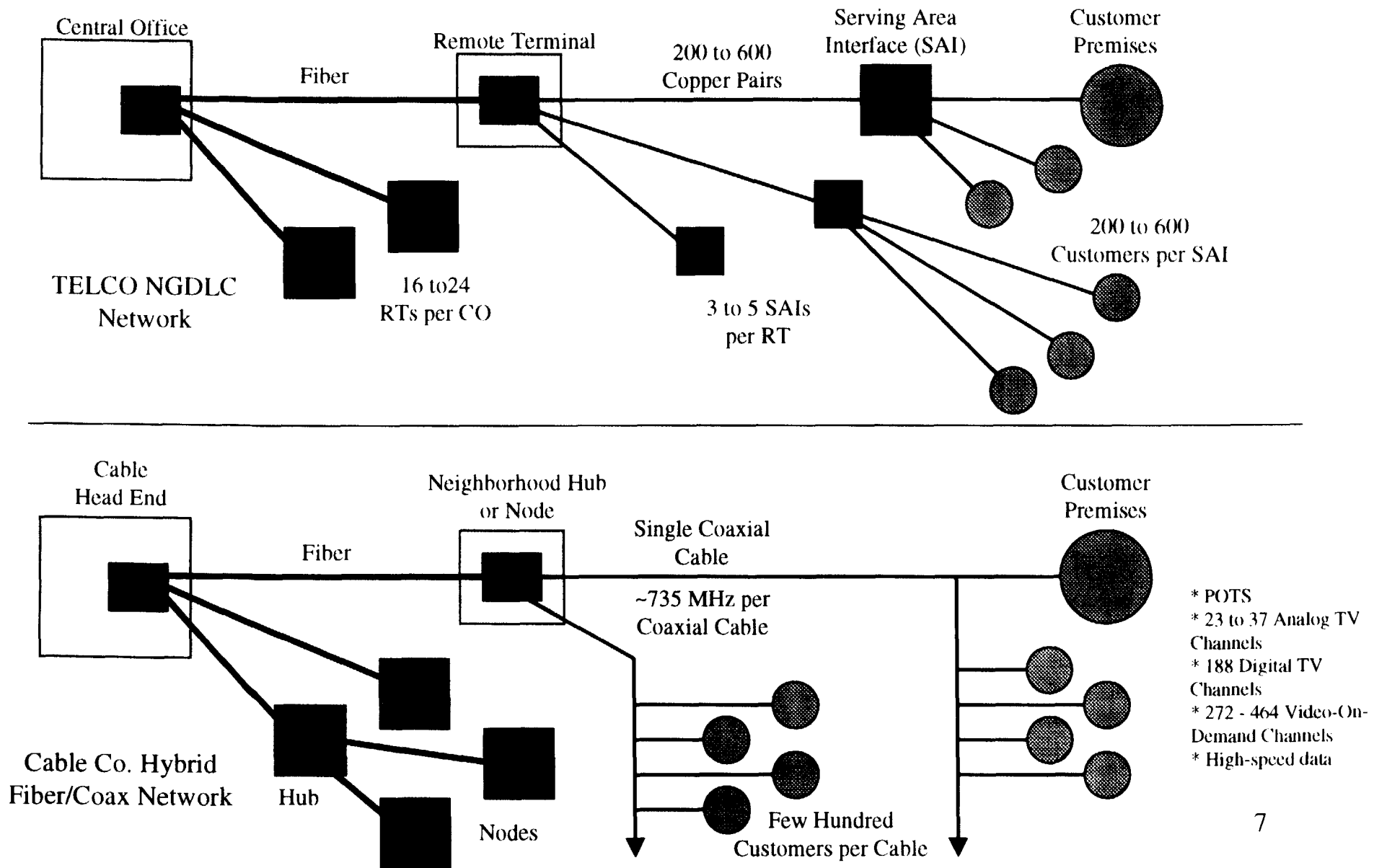
## Broadband: Cable is Dominant Provider



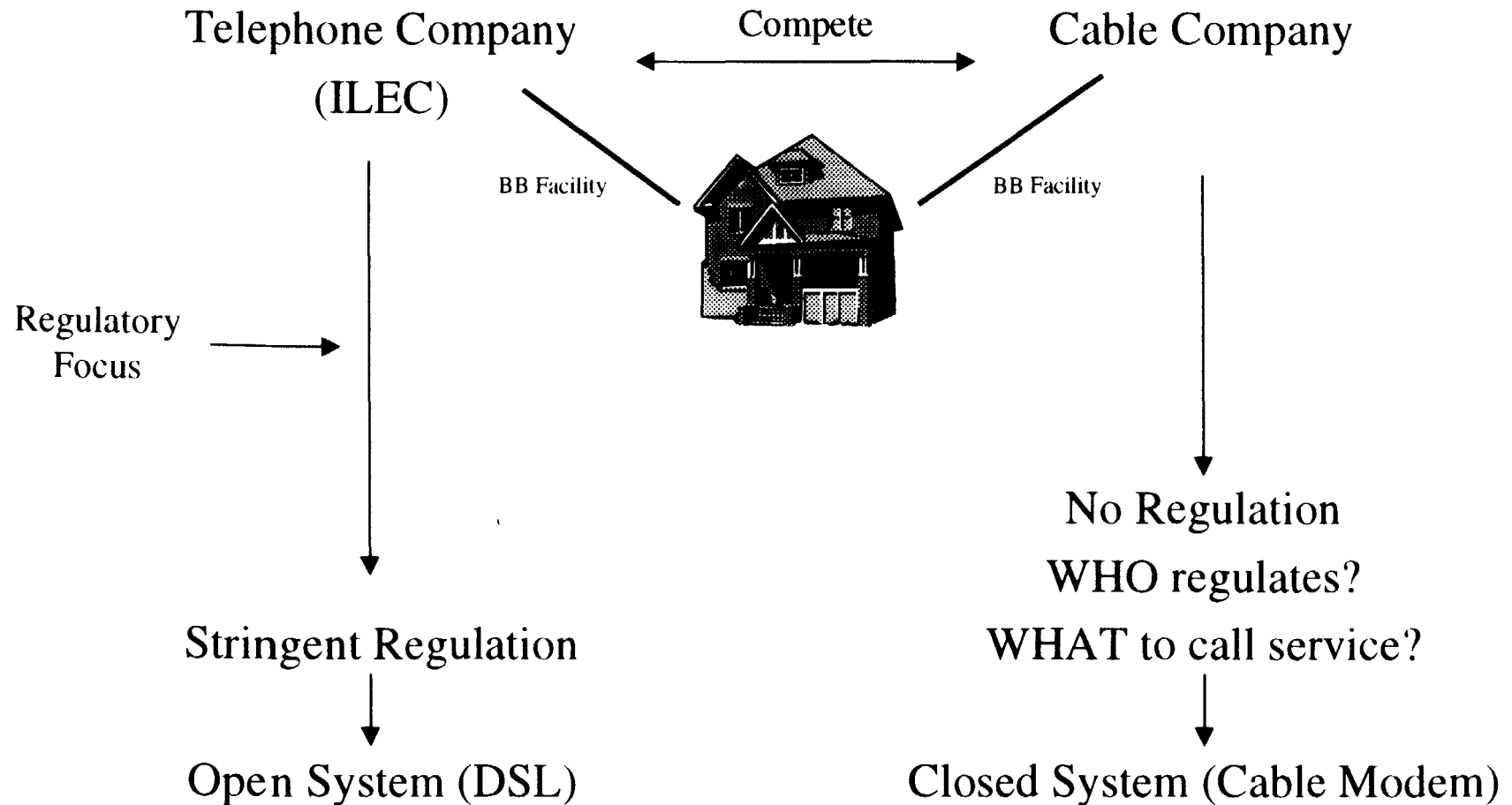
Source: Federal Communications Commission Broadband Survey (1999) released August 3, 2000



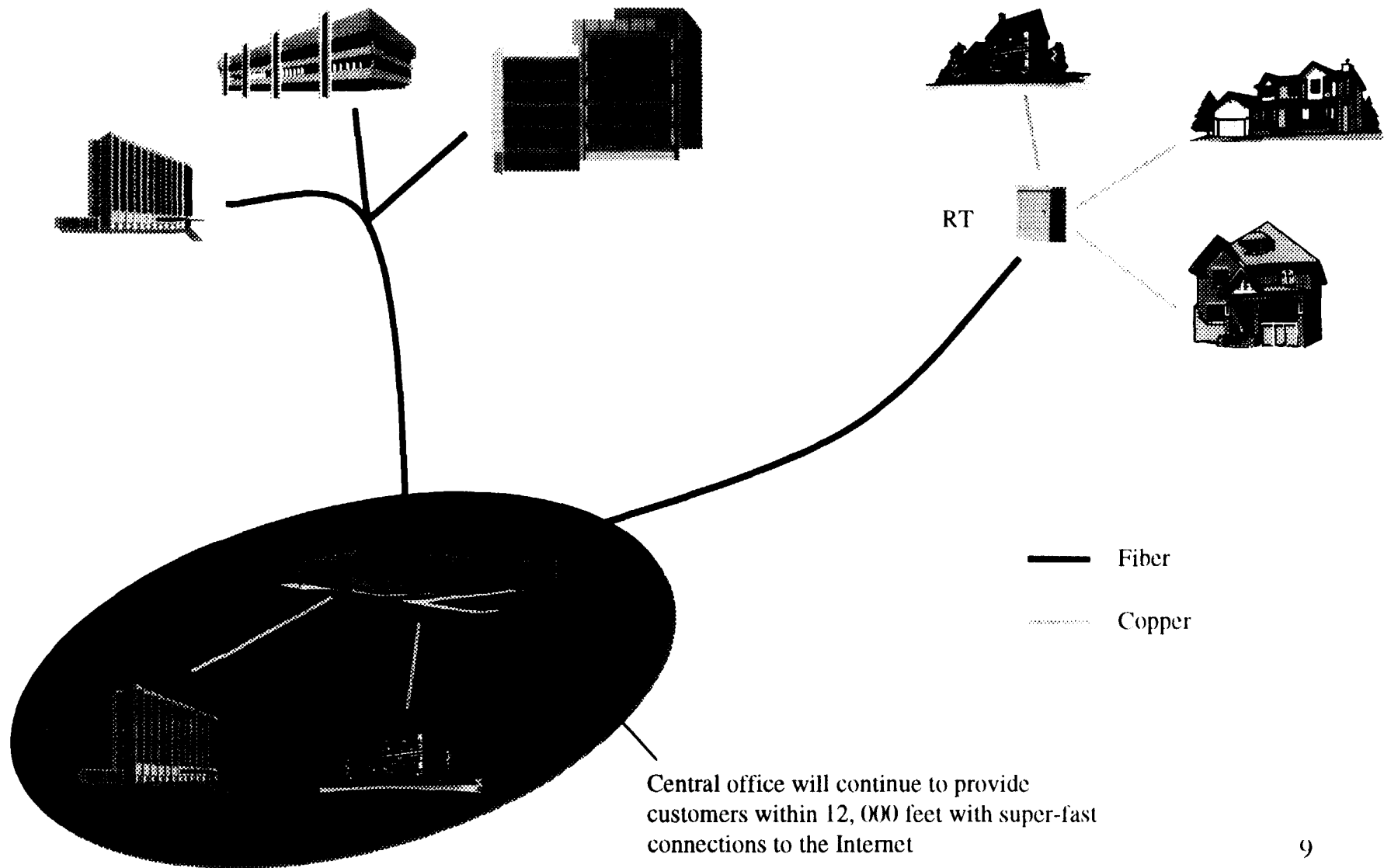
# TELCO vs. Cable Network



# Competing Facilities



# SBC's Broadband Plan



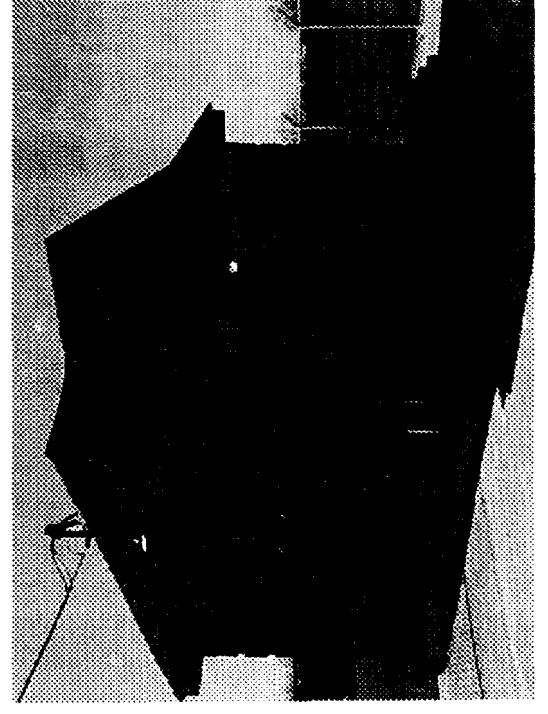
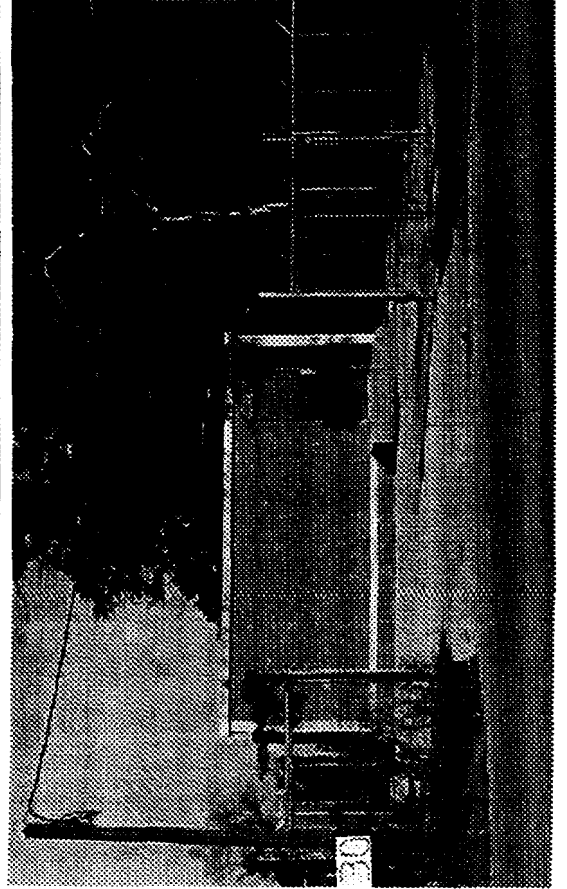
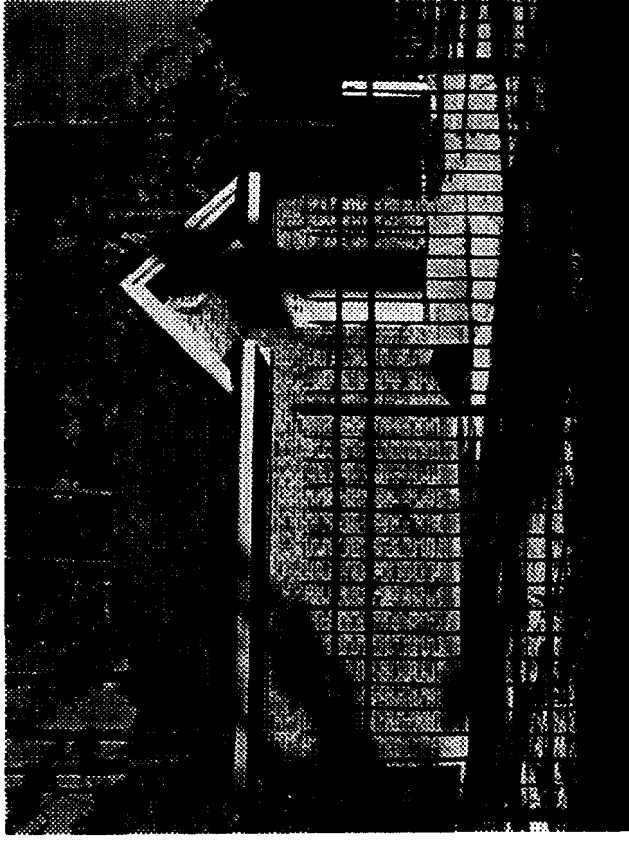
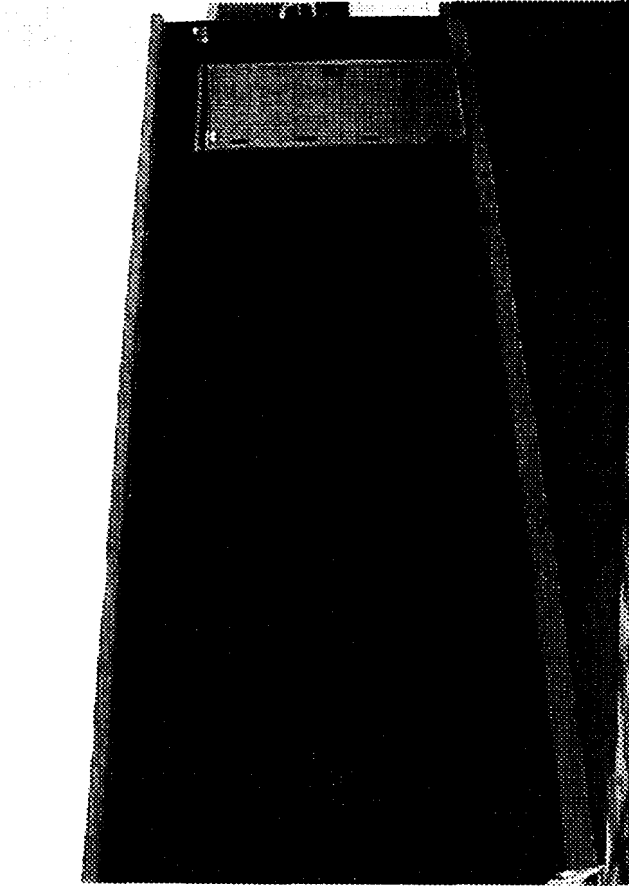
# October 18, 1999 Project Pronto Announcement

---

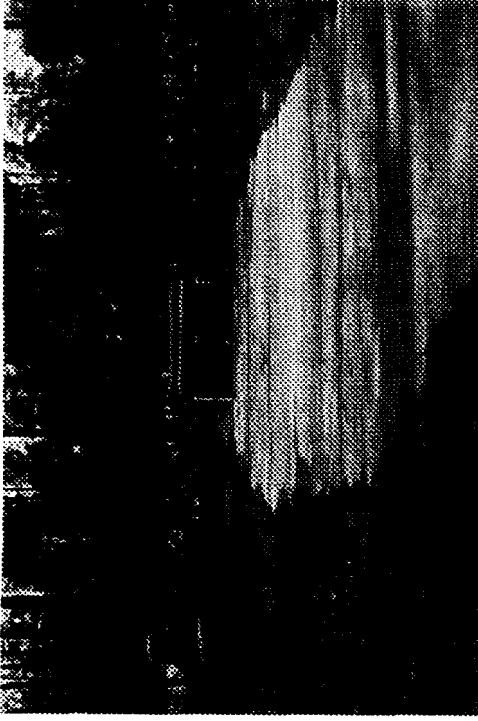


- \$6 Billion investment over 3 years
- Provide broadband capability to approximately to 35 million customer locations
  - Extend broadband reach to approximately 80% of customers (77 million people)
  - 1.5 Mbps download
  - 60% of broadband customer base up to 6 Mbps download
- Remote Terminals
  - 18,000 Existing
  - Build or upgrade approximately 17,000
  - 40% Huts/CEVs
  - 60% Cabinets

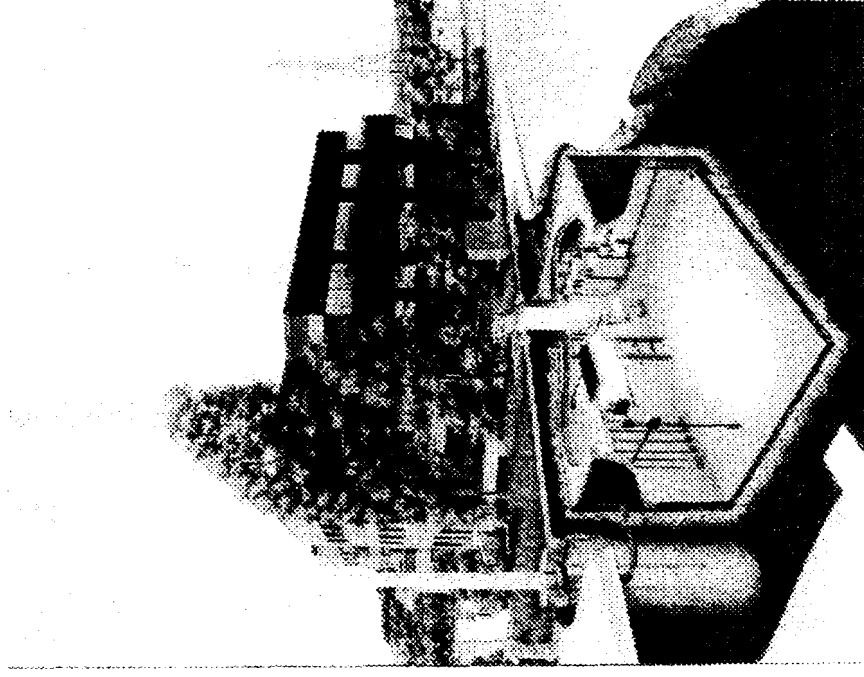
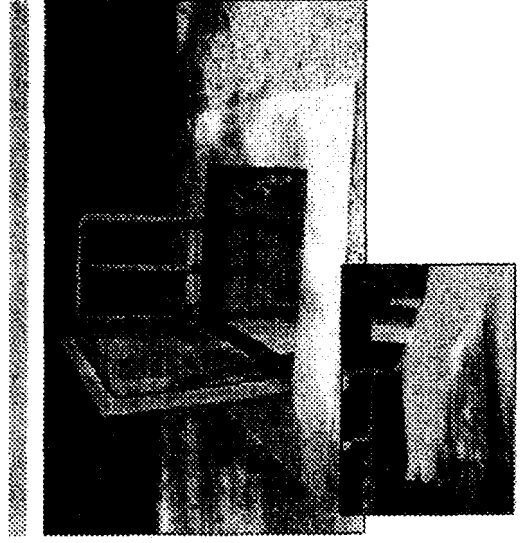
# Remote Terminal Huts



# Remote Terminal CEVs



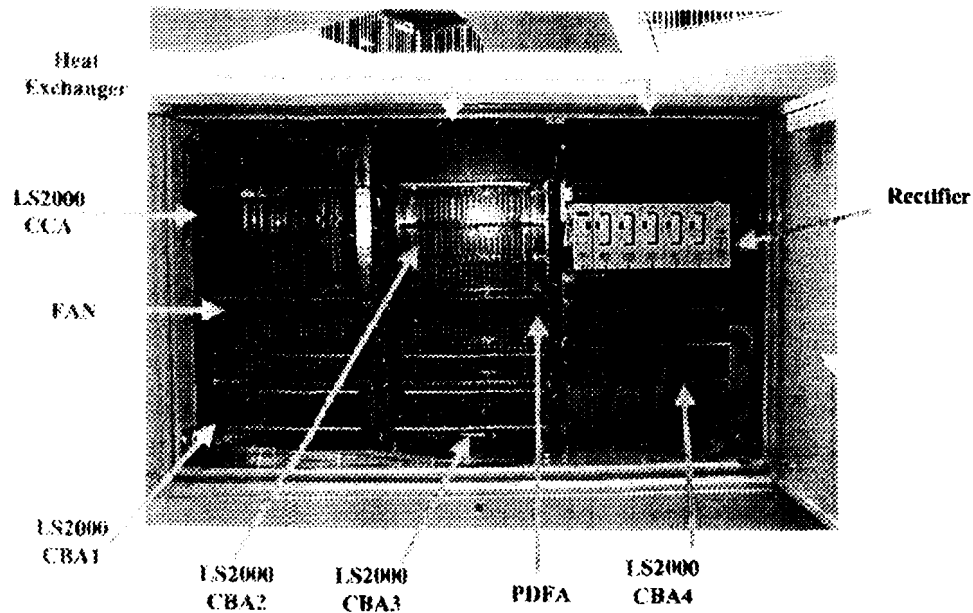
**Flush Mount Hatch**



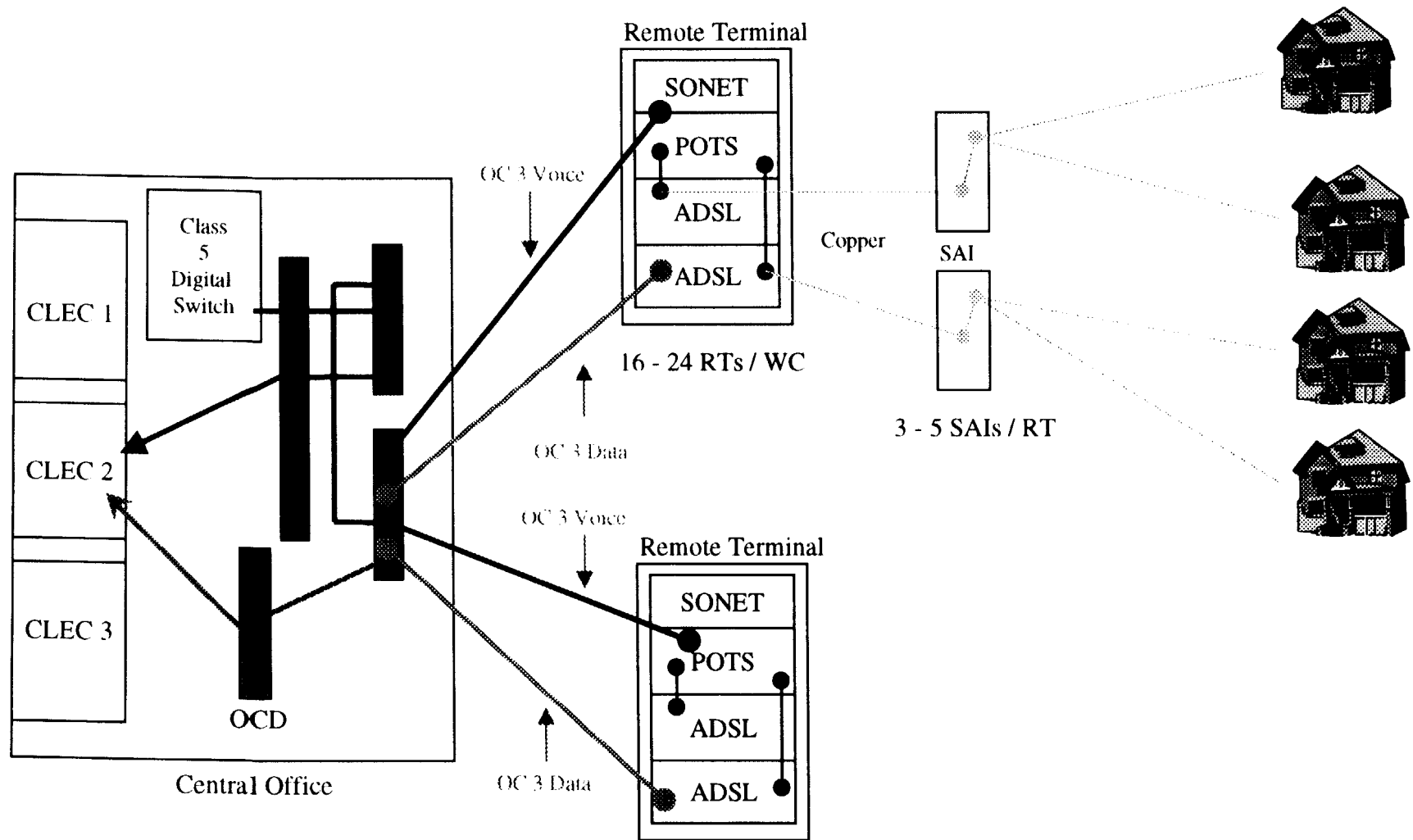
# Remote Terminal Cabinets



2016 Cabinet/6 CBAs/Side 1/PDFA Equipped

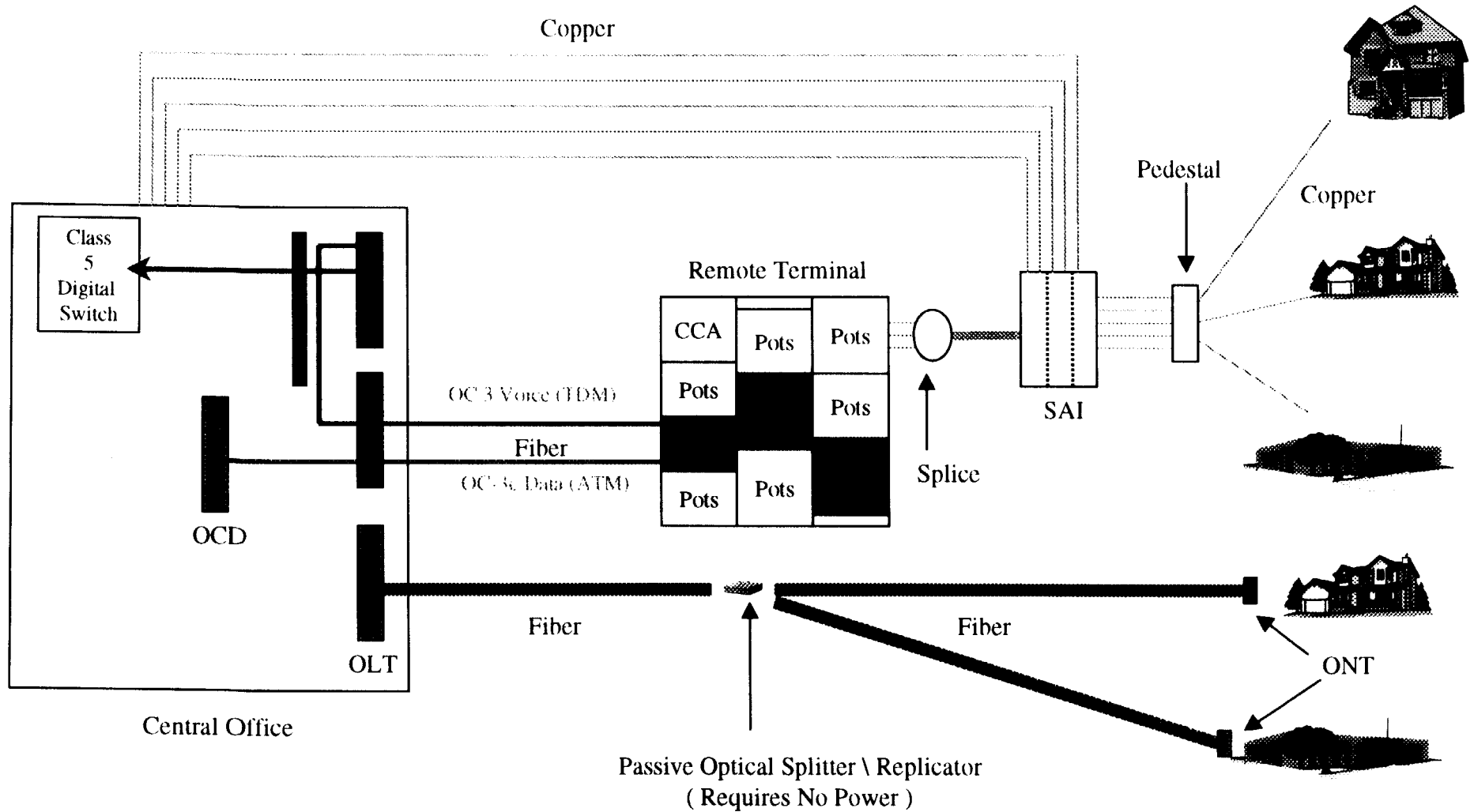


# Project Pronto Network Architecture

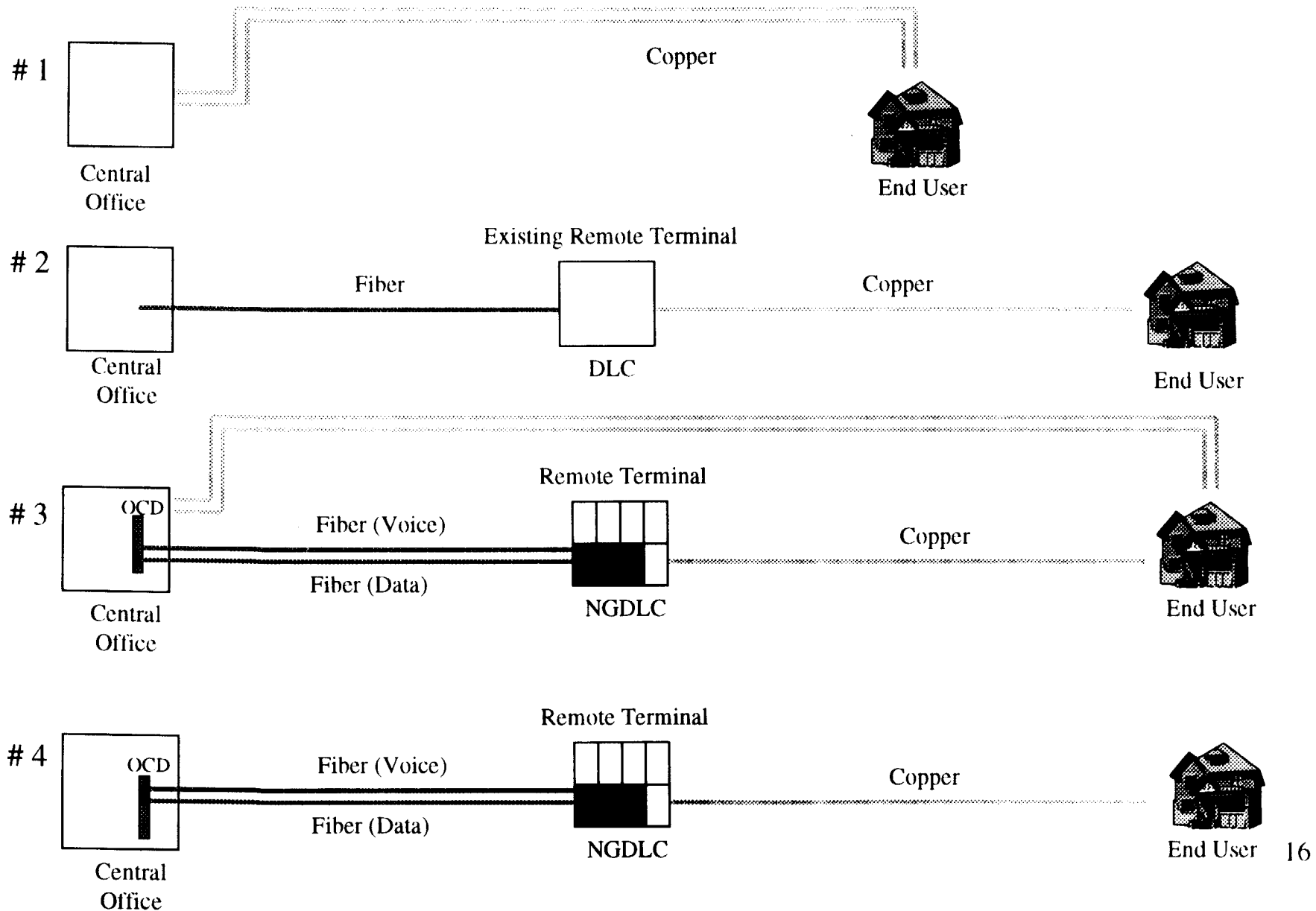




# Project Pronto: Overlay Network



# Different Loop Configurations



# Current Regulation



---

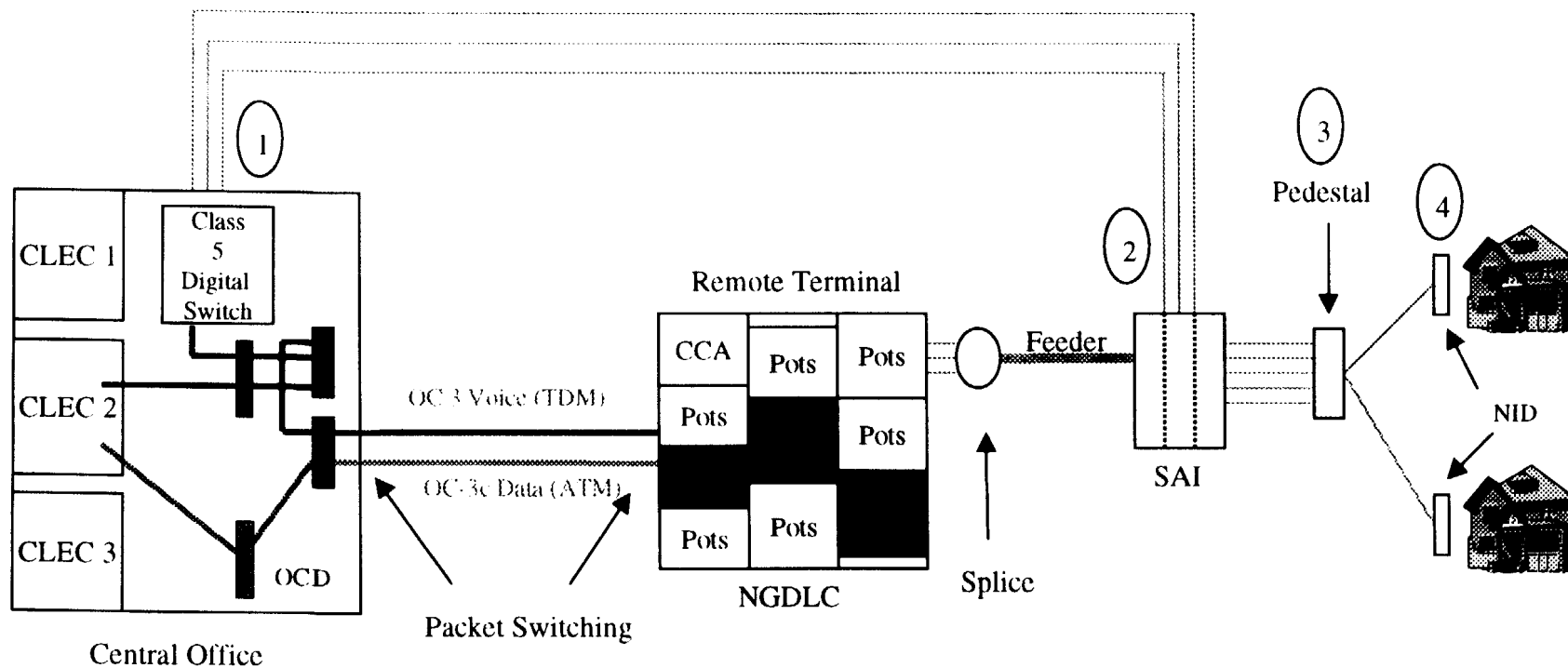
## 1996 Telecommunications Act: Unbundled Network Element (UNE)

- Sec 251 (c ) (3): UNBUNDLED ACCESS: The duty to provide to any requesting telecommunications carrier for the provision of a telecommunications service, non discriminatory access to network elements at any technically feasible point at rates, terms, and conditions that are just, reasonable and nondiscriminatory ...
- Sec 251 (d) (2): If access to such network element is “**necessary**”, and failure to provide would **impair** the TC’s ability to provide the services it seeks to offer ...
- FCC determinations:
  - UNEs are price regulated based on cost of most efficient hypothetical network
  - UNEs include all features, functions, and capabilities of a given unbundled network element

# Current Regulation



- Access to copper loop at technically feasible points (1, 2, 3 and 4)
- FCC Rules: SBC's Project Pronto RT architecture is not subject to UNE regulation (packet switching exempt from UNE unbundling: conditions satisfied)



# Issues Generated in FCC Proceedings: Next Generation NPRM, Line Sharing NPRM

---



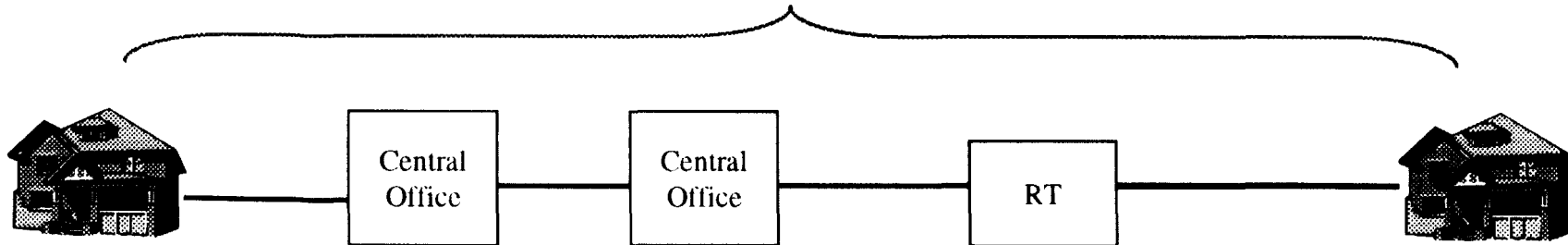
Carriers seek to extend legacy UNE regulation of 96 Act to competitive broadband market:

- Provide new broadband UNE for local loop - Risk free ride
- Provide access to all features and functions of broadband equipment: Constant Bit Rate (CBR); Permanent Virtual Path (PVP)
- Unbundle broadband remote terminal equipment to allow carriers to insert their own line cards
- Treat broadband remote terminals same as central office for space and collocation purposes
- Require access to all copper subloops at all remote terminals as part of broadband deployment

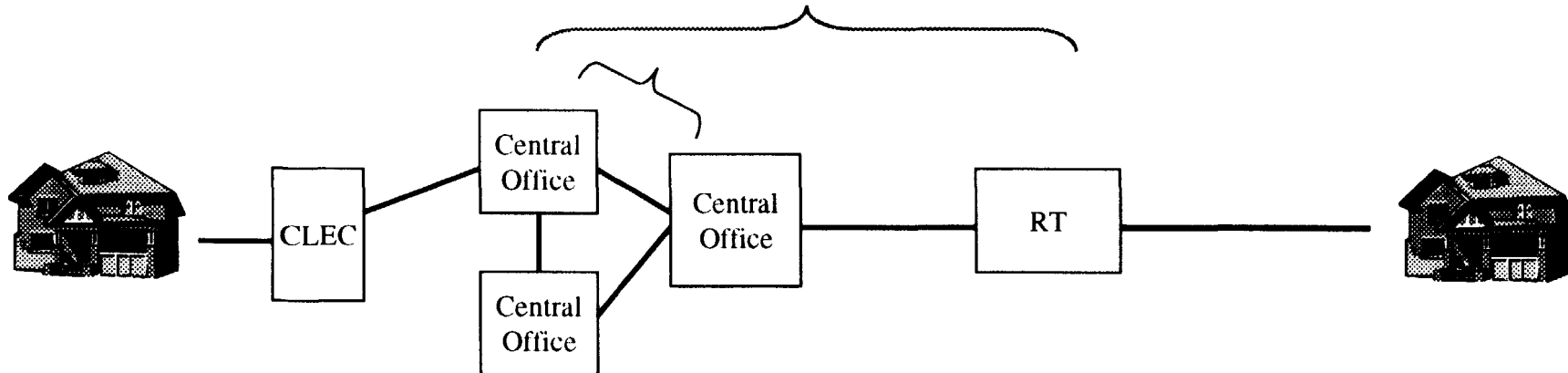
# UNE Regulation of Broadband Investment



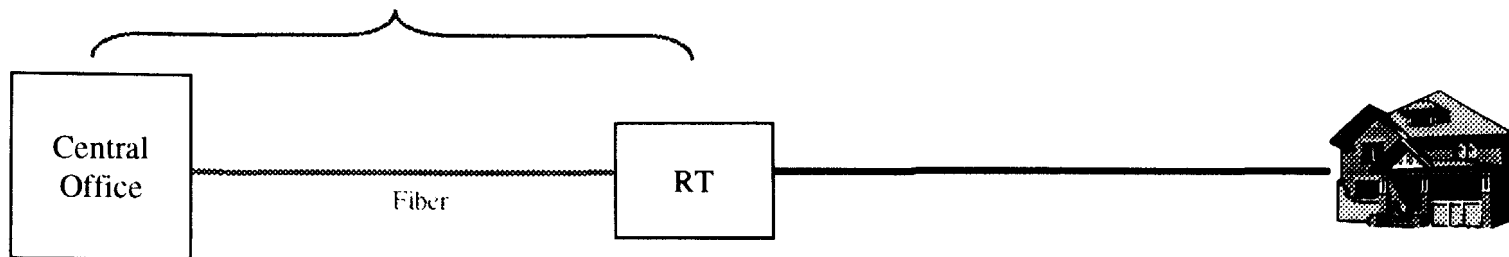
Data UNE Platform - Same Network - Big \$ Discount



Shared Transport



Sub Loop Broadband UNE



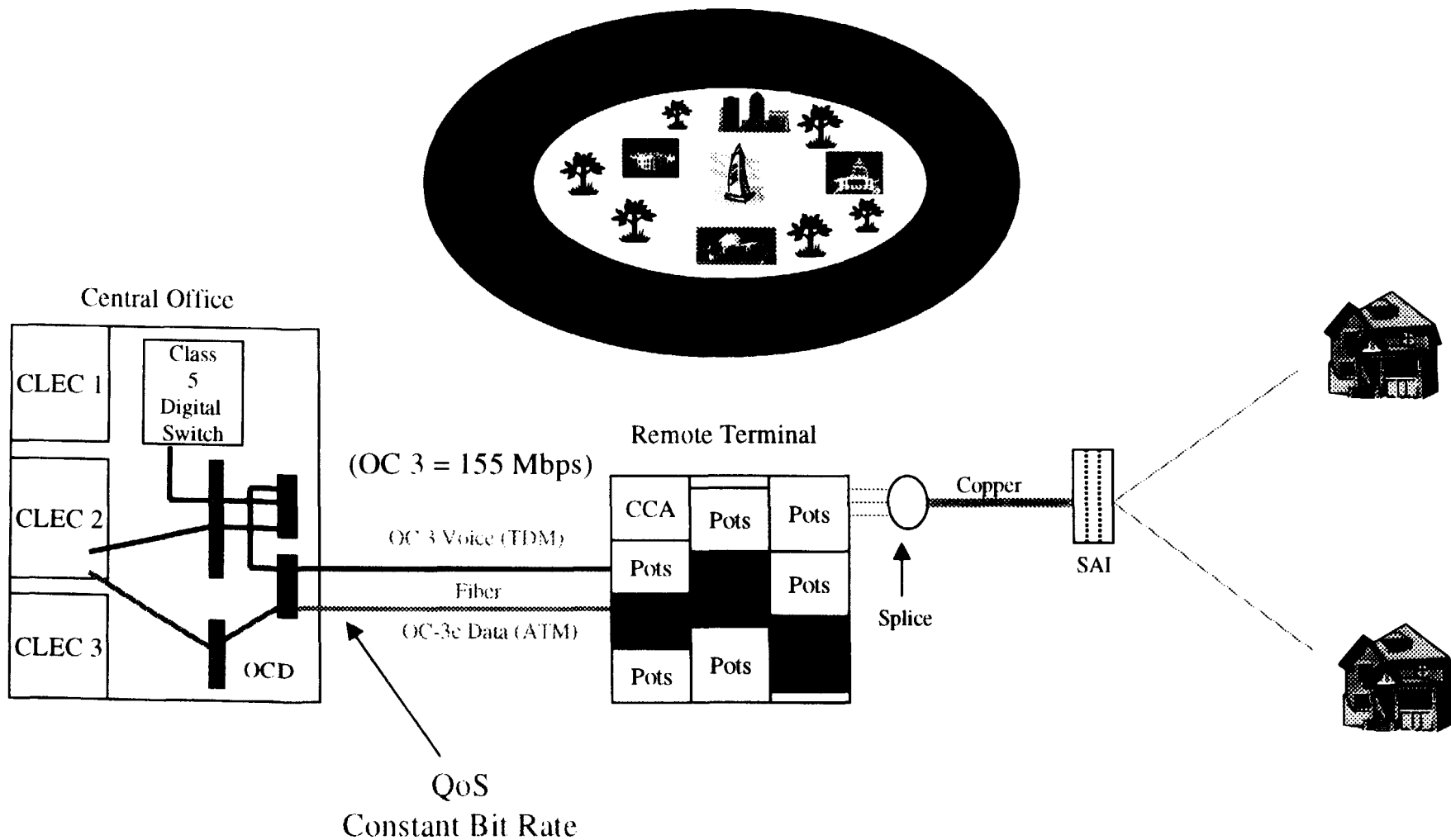
# UNE Pricing: TELRIC Distorts Risk \ Reward Balance



State	Cost of Capital (%) Ordered
Illinois	9.52%
Indiana	9.74%
Michigan	10.60%
Ohio	9.74%
Wisconsin	13.60%
California	10.00%
Missouri	10.36%
Kansas	10.00%
Arkansas	10.36%
Texas	10.36%
Oklahoma	Stipulated Rates 10.69%
Connecticut	12.19%
Nevada	12.19%

# UNE Features and Functions

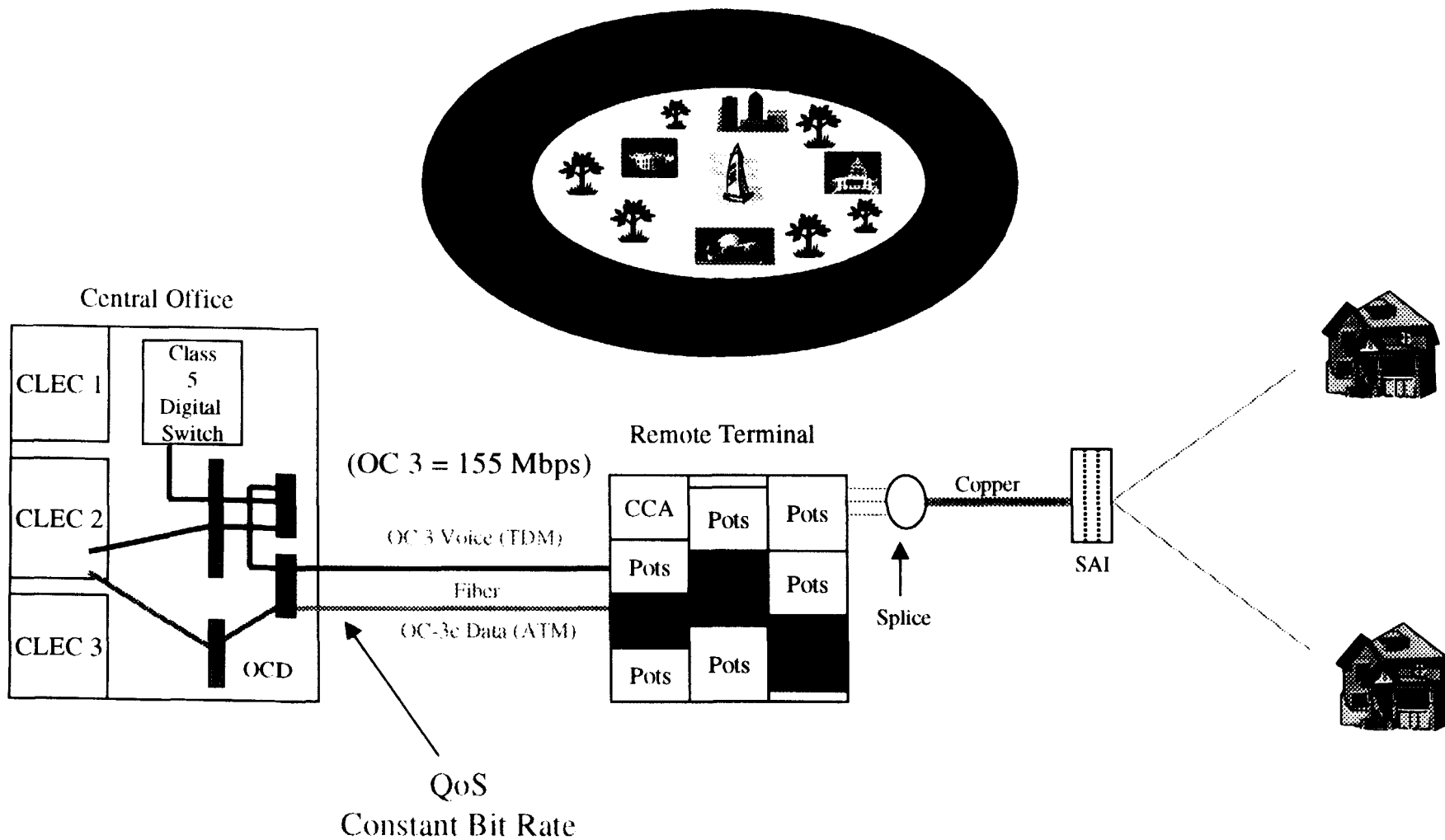
## Constant Bit Rate





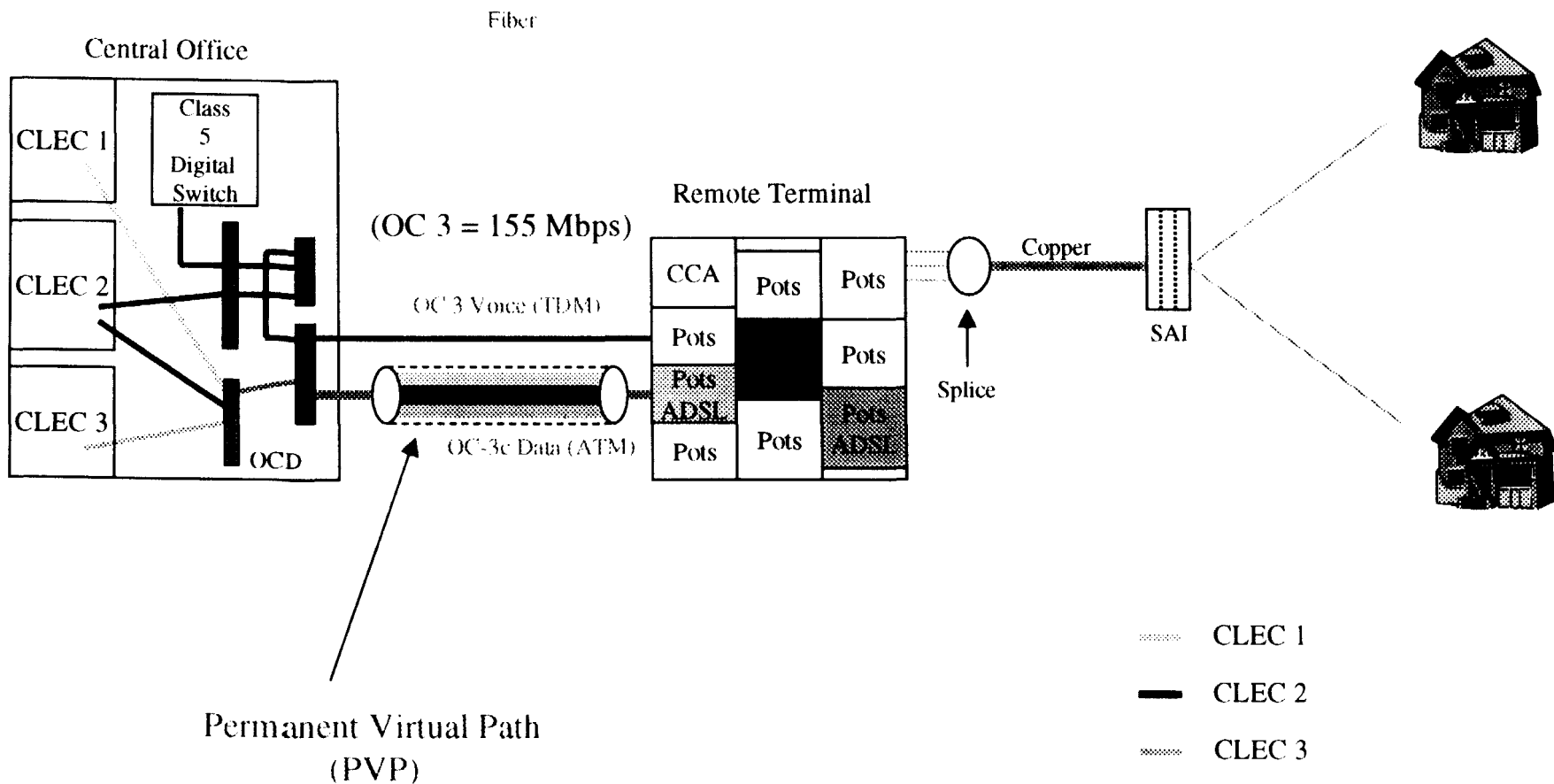
# UNE Features and Functions

## Constant Bit Rate



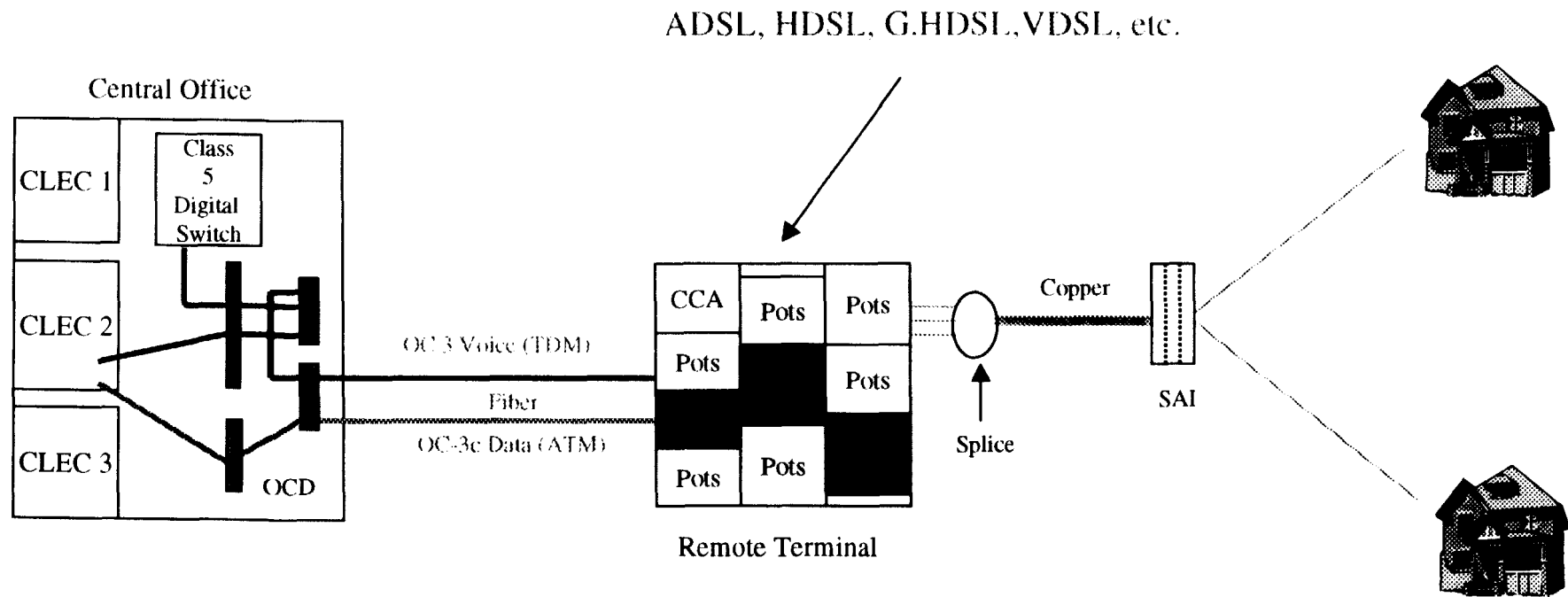
# UNE Features and Functions

## Permanent Virtual Path

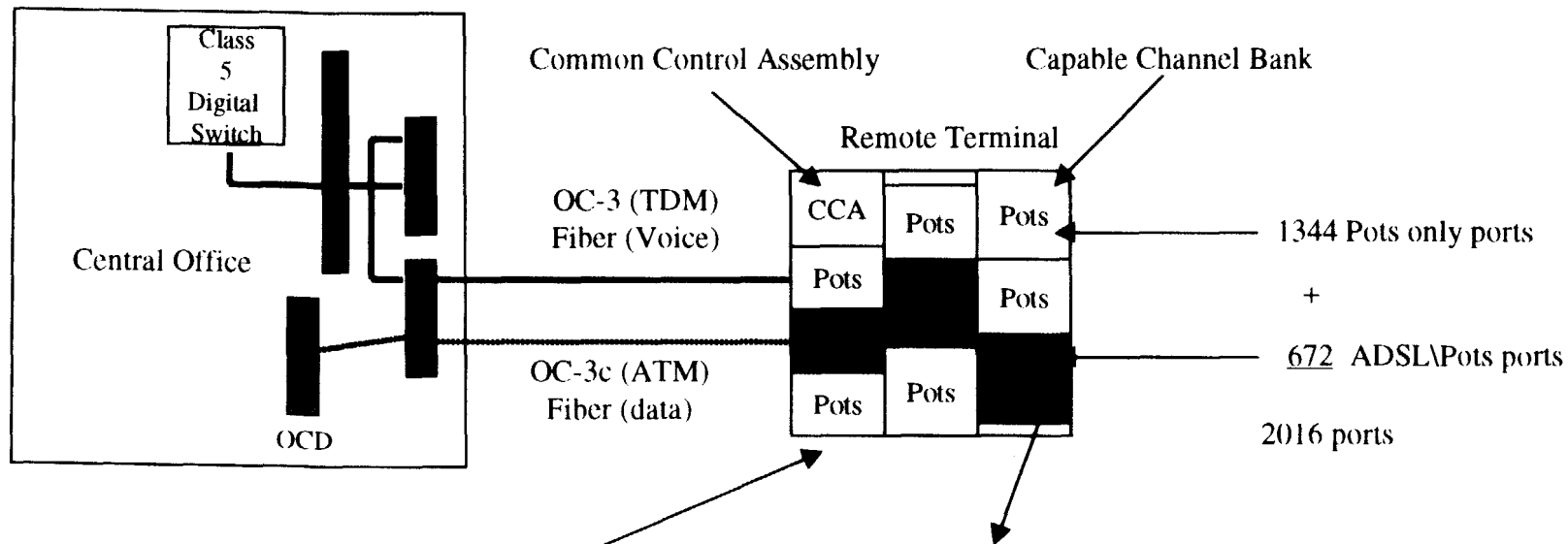


# UNE Features and Functions

## Line Cards

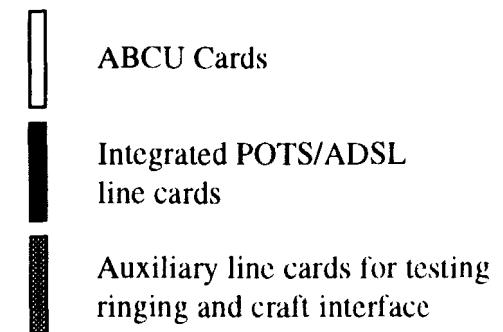
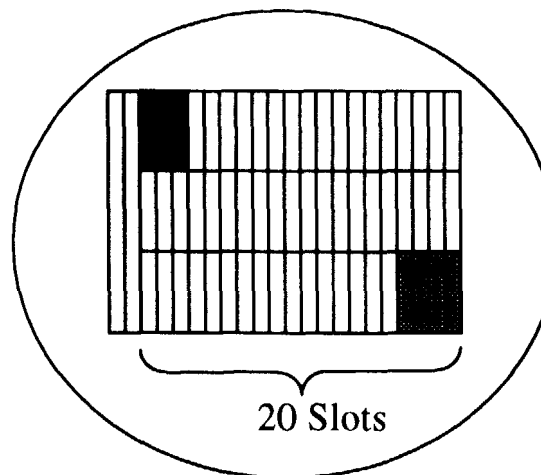


# Remote Terminal: Capacity Limitations

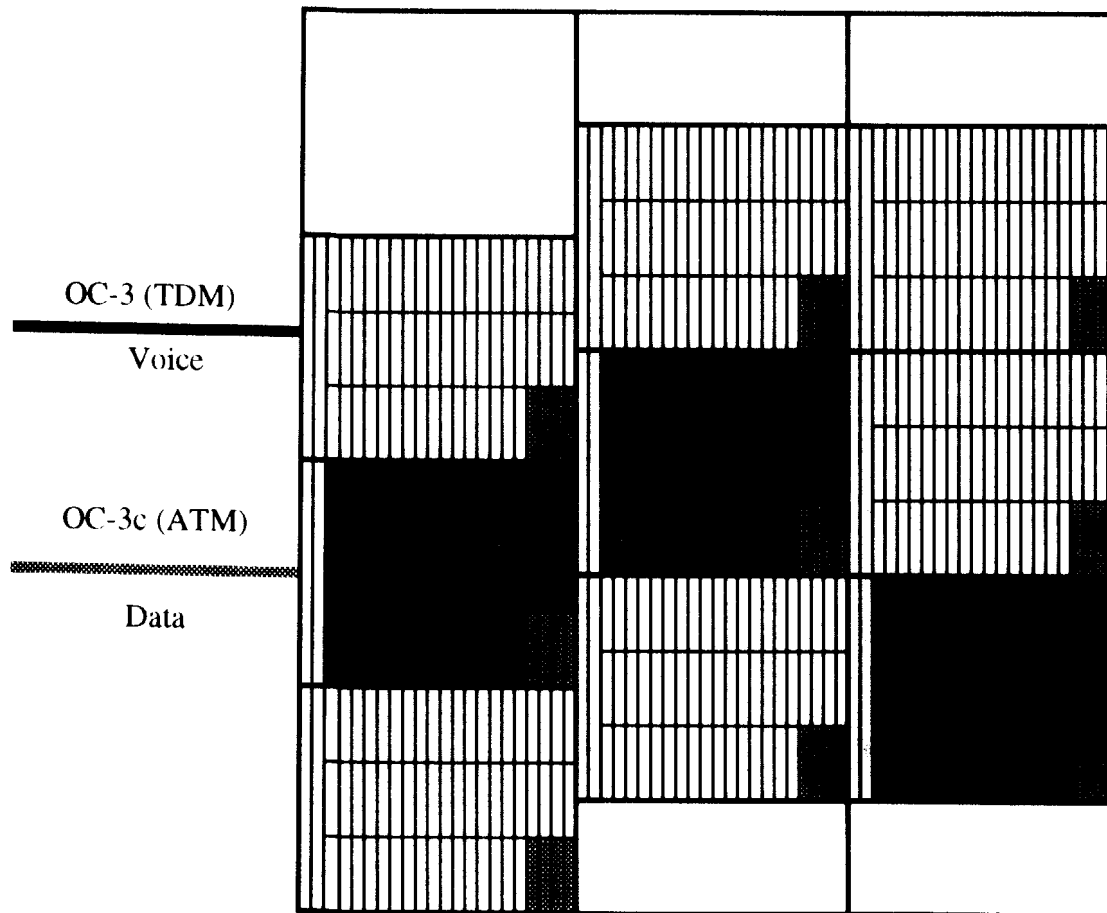


## Litespan 2016

- 9 Channel Banks (CB)
- 56 slots / 4 ports each
- 9 Channel Banks \* 56 slots \* 4 ports = 2016



# Line Card Ownership: Worst Case Scenario



## Key Points

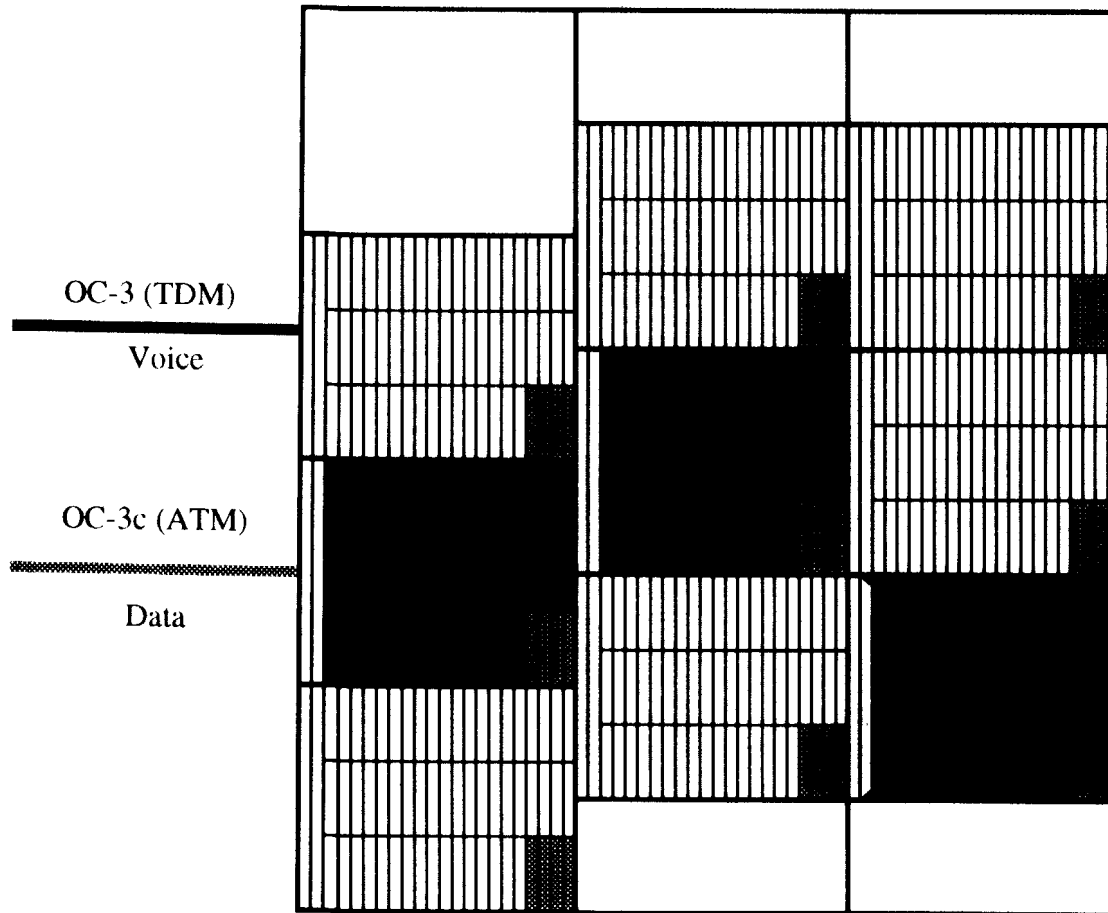
- Unknown: type or quantity of line cards used by CLECs
- Inefficient use of limited RT capacity
  - G.HDSL (ATM): 84 Lines vs. 672
  - HDSL (TDM): 84 Lines vs. 1344

■ Pots \ ADSL

G.HDSL (ATM): Symmetrical 1.5 Mbps Line Card

HDSL (TDM): Symmetrical 1.5 Mbps Line Card

# Line Card Ownership: Worst Case Scenario



## Key Points

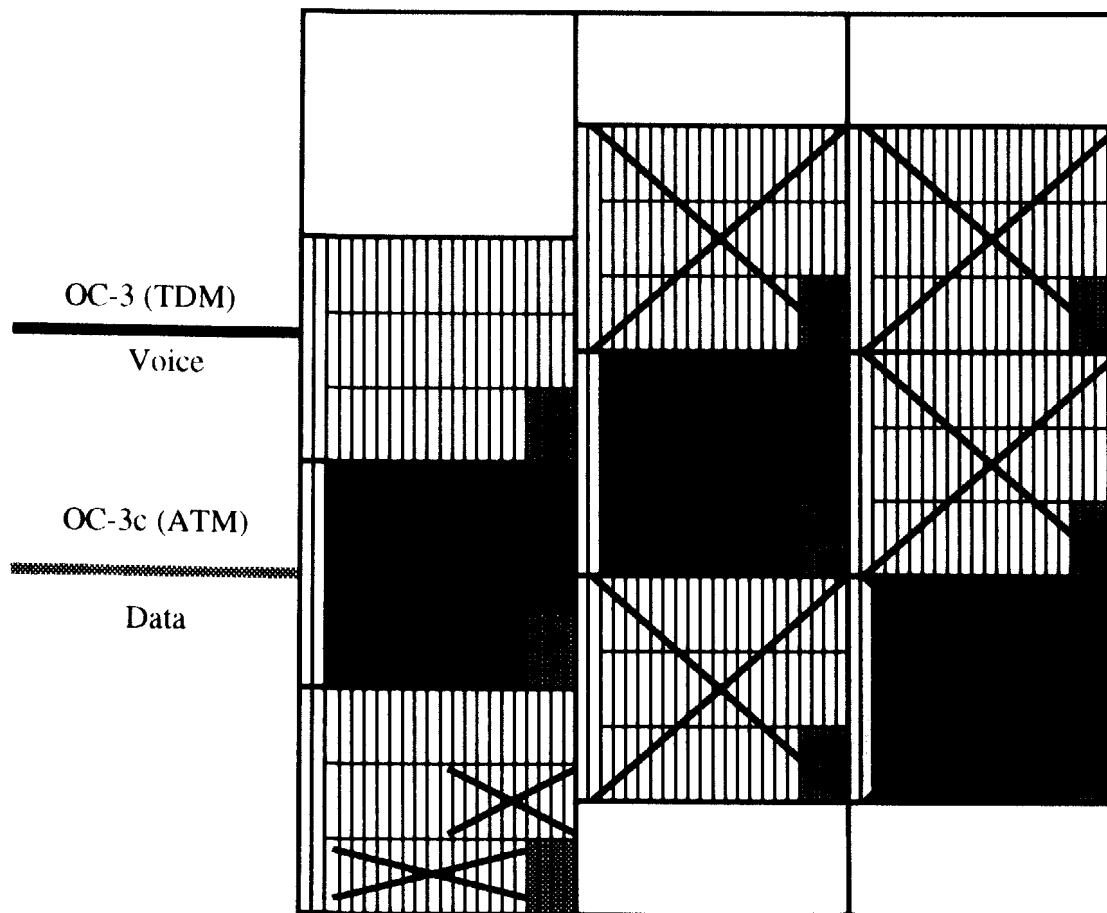
- Unknown: type or quantity of line cards used by CLECs
- Inefficient use of limited RT capacity
  - G.HDSL (ATM): 84 Lines vs. 672
  - HDSL (TDM): 84 Lines vs. 1344

■ Pots \ ADSL

G.HDSL (ATM): Symmetrical 1.5 Mbps Line Card

HDSL (TDM): Symmetrical 1.5 Mbps Line Card

# Line Card Ownership: Worst Case Scenario



## Key Points

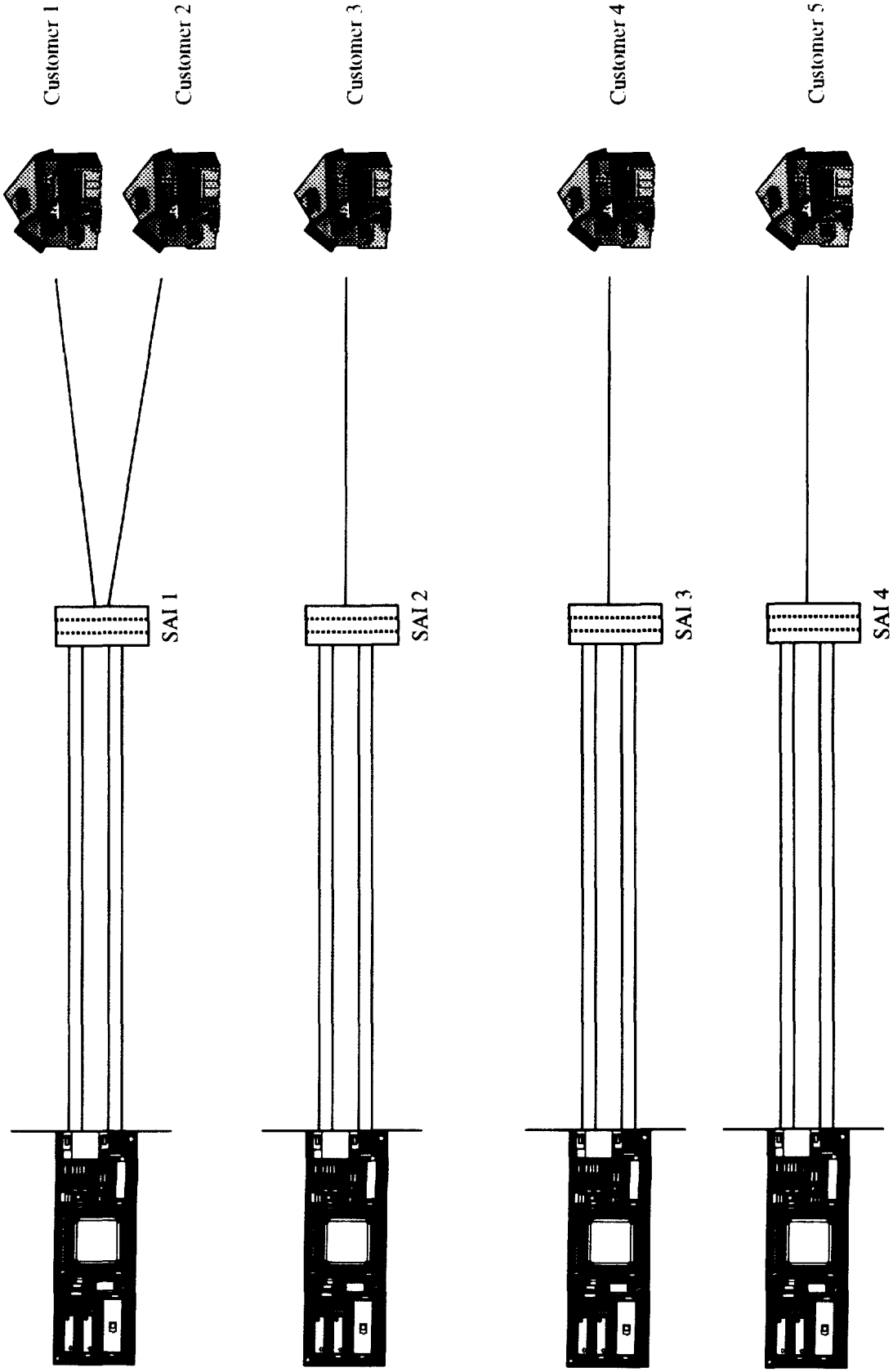
- Unknown: type or quantity of line cards used by CLECs
- Inefficient use of limited RT capacity
  - G.HDSL (ATM): 84 Lines vs. 672
  - HDSL (TDM): 84 Lines vs. 1344

■ Pots \ ADSL

G.HDSL (ATM): Symmetrical 1.5 Mbps Line Card

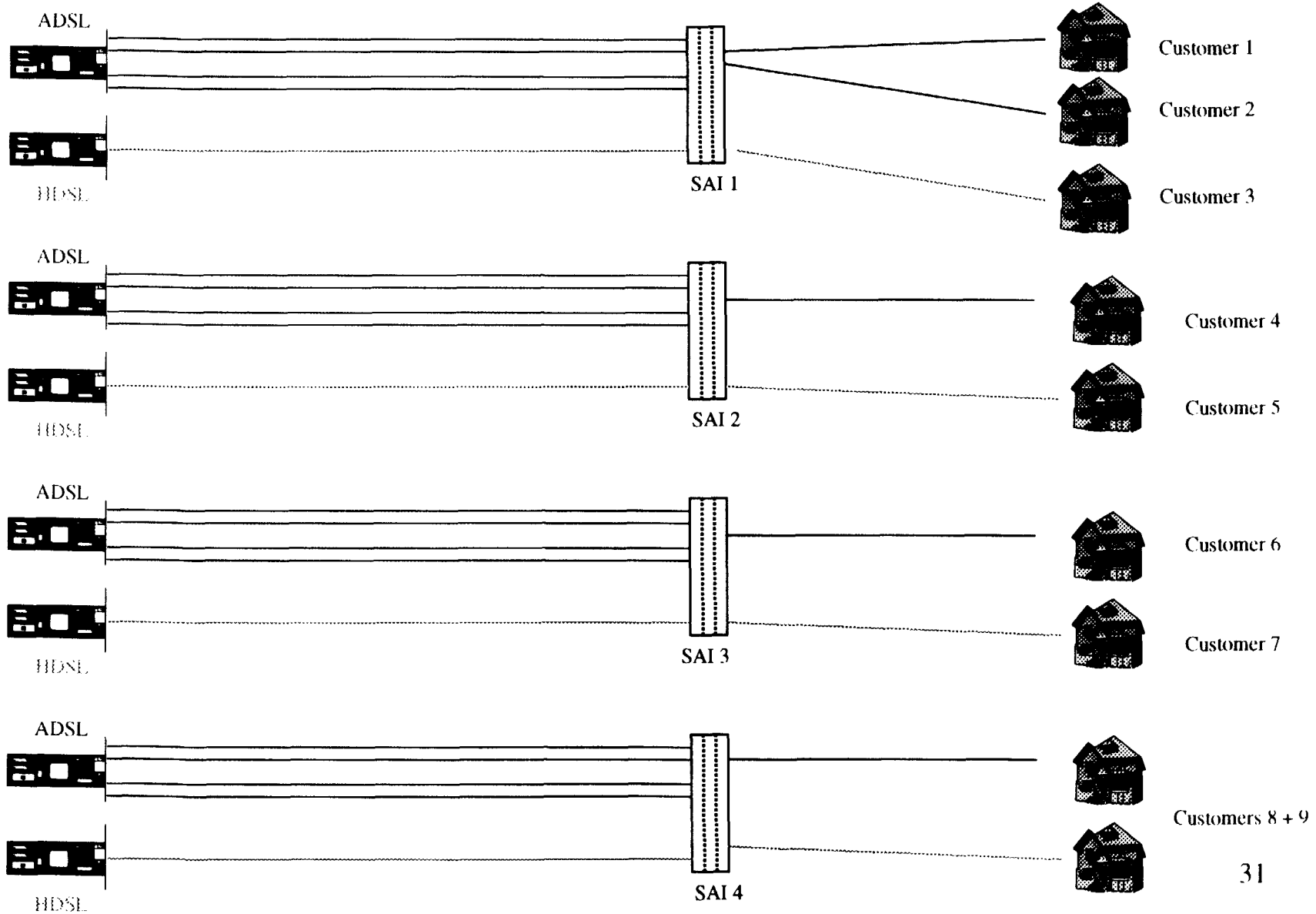
HDSL (TDM): Symmetrical 1.5 Mbps Line Card

# Line Card Ownership Inefficiency: ADSL





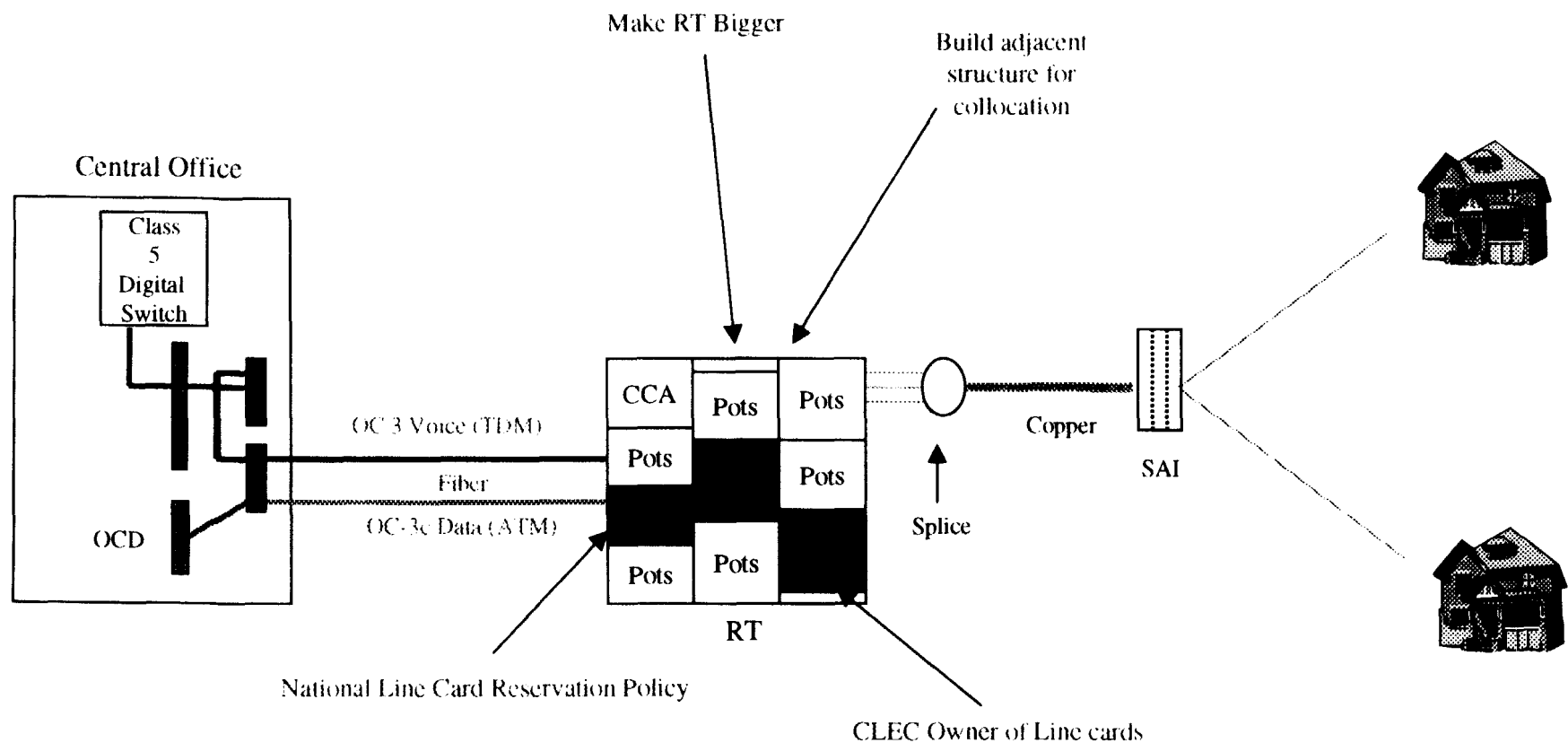
# Line Card Ownership Inefficiency: ADSL & HDSL



32 Dedicated Lines - 9 Used

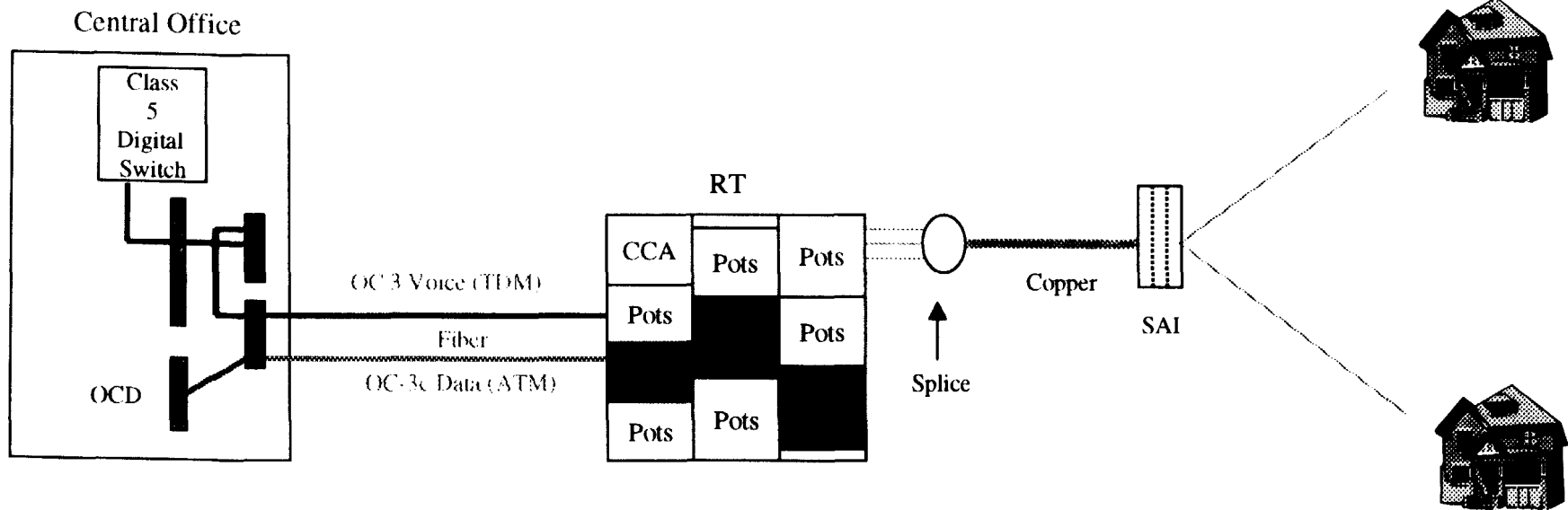
# Regulation Increases Cost Structure

## RT Space and Collocation



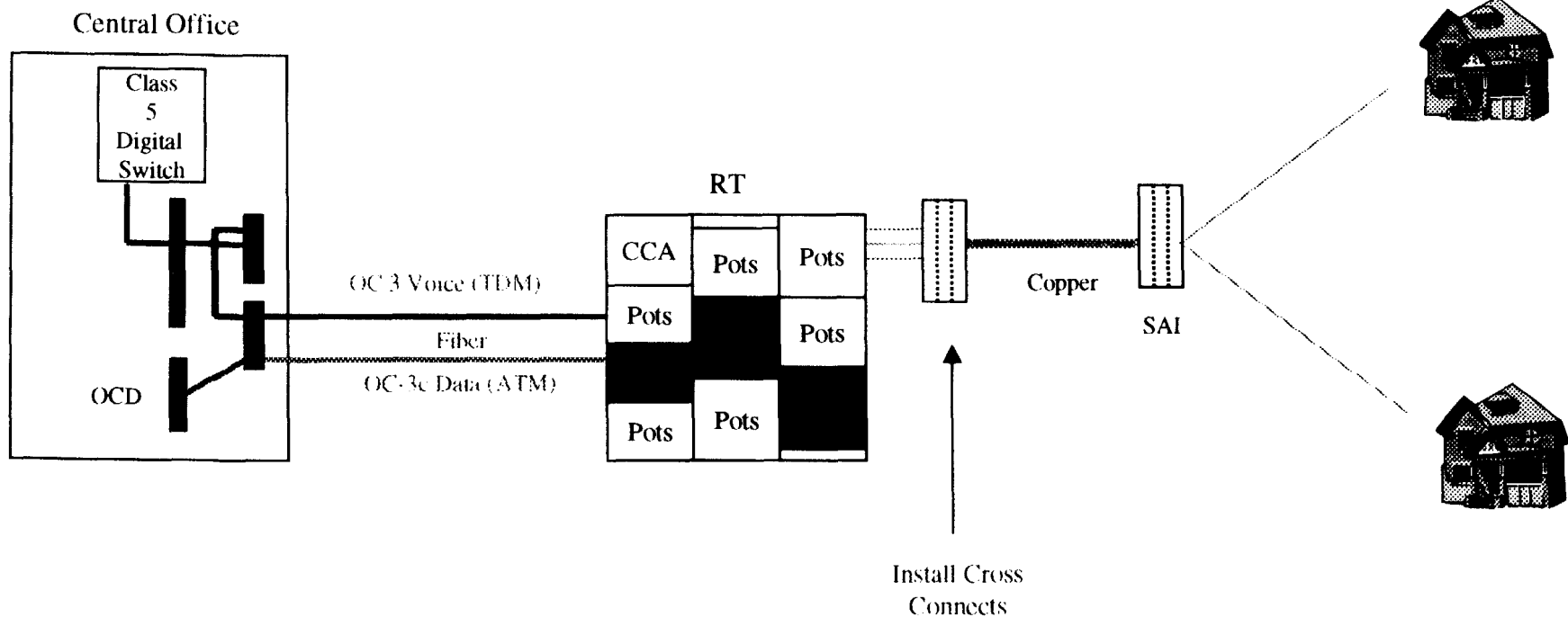
# Regulation Increases Cost Structure

## Access to Copper: Up Front vs. As Needed

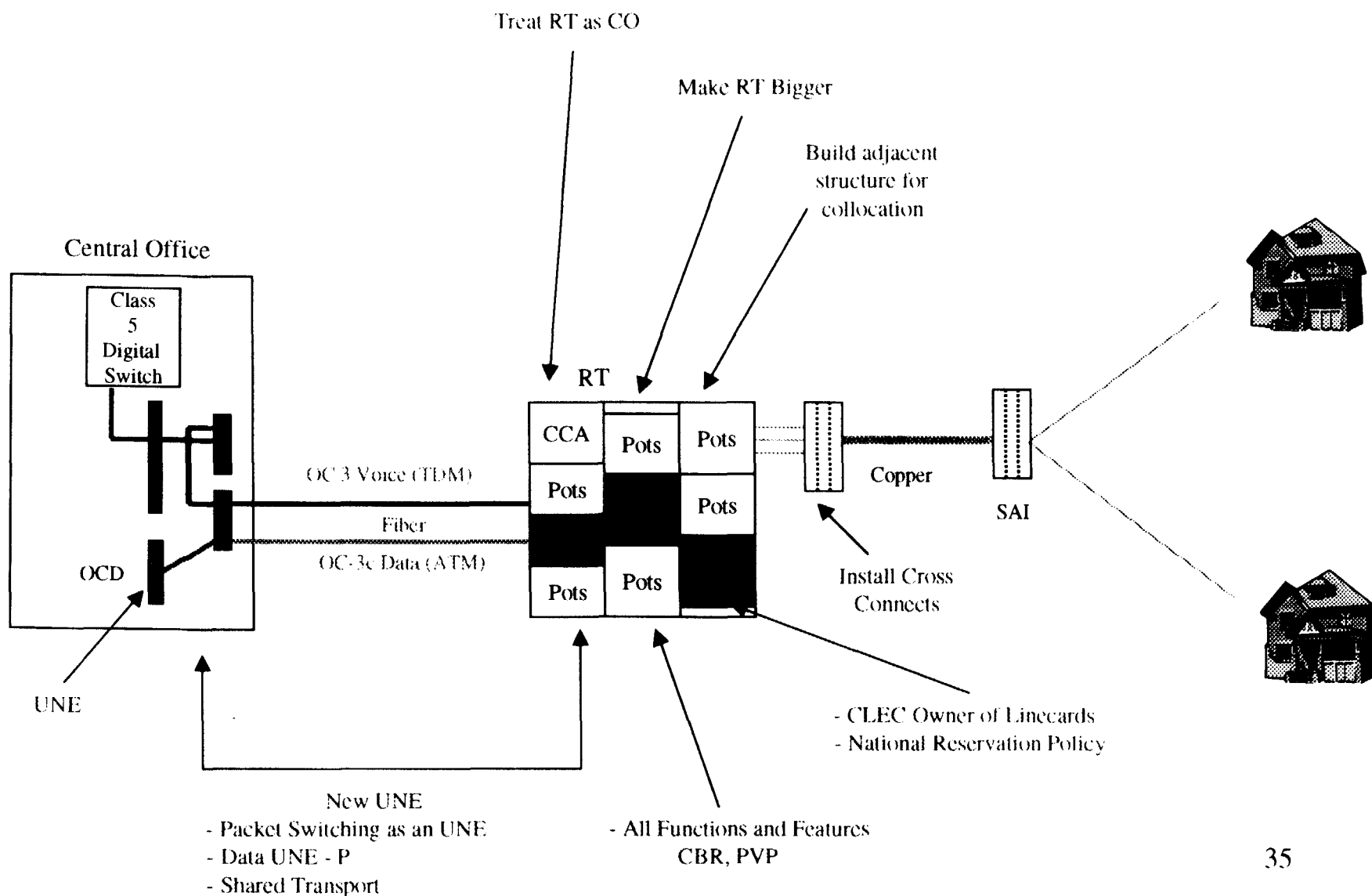


# Regulation Increases Cost Structure

## Access to All Copper: Who Pays?



# Summary: Extensive Regulation of Broadband



# State Proceedings: Illinois



---

## Decision:

- Require new UNEs:
  - Lit fiber between RT and CO
  - Copper subloop from RT
  - ADLU card
  - Port on OCD
  - Any combination of above
- CLECs can collocate line cards
- CBR and PVP available (Features and Functions)
- Prohibits AIT-Illinois from recovering costs of capacity rendered unusable
- Charge \$0 for lineshared HFPSL

# Illinois: Deployment of Project Pronto DSL Facilities is Economically Infeasible

---



- Between \$46.3M and \$500M of additional capital cost to make up for stranded capacity
- Between \$140M and \$200M for additional OSS related and BackOffice systems improvement
- AIT-Illinois unable to budget or provision for own services
  - Wide potential costs variances
  - High level of uncertainty as to how and extent of use by CLECs
  - System exhaust for mass market deployment
  - Deprived of control and deployment of assets
- AIT-Illinois could bear huge financial risks without assurance of recovery
- Potential for huge amounts of stranded capacity as CLECs change business plans and as customers change DSL providers
- Costs would have to be added to a product that is price sensitive

## Decision:

- Require new UNEs:
  - Lit fiber between P and C
  - Copper subloop between C and F
  - ADLU card
  - Port on OC
  - Any combination of above
- CLECs can replicate line cards
- CBR and PV available (Features and functions)
- Prohibits AIT from recovering cost of capacity rendered unusable
- Charge \$0 for leased HFPSL



## Decisions in Other States



### Michigan:

- No unbundling of Pronto (FOR NOW)

**But:** Investigate future linesharing over fiber

### Texas: (ALJ Arbitration Decision)

- Unbundle - Provide a broadband UNE
- Features and Functions: Provide unless technically infeasible
- OCD: offer DS1 ports
- Access to copper at RT
- Increase bandwidth between RT and CO if no dark fiber
- No line card collocation -- May revisit later

# Extending UNE Regulation will Distort Economics of Broadband Deployment

---



- Increased infrastructure cost
  - Larger Remote Terminals
  - Install Cross Connects
- Increased operational cost
  - Development of line card management \ inventory systems
  - Development of new operation support systems
- Decreased network efficiency
  - Premature exhaust of system due to stranded capacity: CBR, PVP
  - Decreased efficiency of carrier specific line cards

# Extending UNE Regulation will Distort Competition

---



- **Bottom Line:** TELCO broadband service must be price competitive with cable modem service
- Pronto Waiver Costs: Larger RTs; OCDs
- UNE Regulation:
  - Distorts investment Risk \ Reward balance
  - Reduces need for CLECs to invest in facilities -- RISK FREE RIDE!
  - Hinders mass market broadband deployment
  - Increases regulatory disparity between facility providers (Cable, Wireline, Wireless, and Satellite)
- **IRONY:** Demand for UNE regulation of TELCO broadband targets the non-dominant provider -- Cable is the dominant provider of broadband to the mass market

## Conclusion: “Last Mile” Broadband Deployment is a Problem in Need of a Solution

---



- Regulatory involvement in technology increases uncertainty, slows deployment, and can adversely effect business case fundamentals
- FCC has come full circle from Computer II --
  - CI-II removed regulation from technology in Information Services and CPE
- Potential broadband UNE regulation intertwines regulation with technology deployment decisions (e.g. Pronto, DWDM, BPON, Etc.)
  - Need to remove “regulatory chill” pervading broadband deployment
- Consumers have less choice of facility providers; deprived of new services
- Extension of UNE regulation to broadband investment must be evaluated in a comprehensive fashion that takes into account competing facility providers
  - Unified national framework vs. ad hoc decision making